

Fac/Perm/Co ID #	Date	Doc ID#
26-09T	05/22/09	DIN 7733

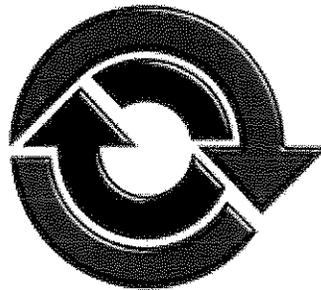
**APPROVED**  
 DIVISION OF WASTE MANAGEMENT  
 SOLID WASTE SECTION  
 DATE: 5-31-09 BY: *Chris Little*  
 PTO/PTC Doc Id # 8003/805

# Application for Permit to Construct

**City of Fayetteville Transfer Station**  
**Fayetteville, North Carolina**  
 NC Solid Waste Permit No. 26-09-T

Prepared For:

**Waste Industries, LLC**  
 3301 Benson Drive, Suite 601  
 Raleigh, North Carolina 27609



Prepared By:



**May 2009**

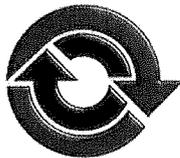
Fac/Perm/Co ID #	Date	Doc ID#
26-09	05/22/09	DIN 7733

## Application for Permit to Construct

**City of Fayetteville Transfer Station  
(NC Solid Waste Permit No. 26-09-T)  
Fayetteville, North Carolina**



Prepared for:



**Waste Industries, LLC**  
3301 Benson Drive, Suite 601  
Raleigh, North Carolina

RSG Project No. FAYETTEVILLE-09-8

*Thomas B. Maier*  
Thomas B. Maier, P.E.  
Senior Engineer



**May 2009**

**CITY OF FAYETTEVILLE TRANSFER STATION**

**APPLICATION FOR PERMIT TO CONSTRUCT**

**TABLE OF CONTENTS**

	<u>Page</u>
1. GENERAL INFORMATION .....	1
2. PROPERTY INFORMATION AND MAPS .....	2
3. OPERATIONS PLAN .....	2
4. SEDIMENTATION AND EROSION CONTROL PLAN .....	2
5. FINANCIAL ASSURANCE .....	3
6. TRAFFIC STUDY .....	3
7. SIGNATURE PAGES .....	3
8. ENGINEERING DRAWINGS .....	3

**FIGURES**

Figure 1 Site Location Map (USGS Topographic Map)

**ATTACHMENTS**

Attachment A Signature Pages  
-Applicant Signature Page  
-Notarized Landowner Authorization Form

Attachment B Current Solid Waste Permit  
Attachment C Land Deeds  
Attachment D City of Fayetteville Compliance  
Attachment E Floodplain Compliance  
Attachment F Wetlands Compliance  
Attachment G Operations Manual  
Attachment H Erosion and Sedimentation Control Plan  
Attachment I Financial Assurance Calculations  
Attachment J Traffic Compliance  
Attachment K Engineering Drawings

**CITY OF FAYETTEVILLE TRANSFER STATION**

**APPLICATION FOR PERMIT TO CONSTRUCT**

**TABLE OF CONTENTS**

**(continued)**

**LIST OF ENGINEERING DRAWINGS IN ATTACHMENT K**

**Drawings by Richardson Smith Gardner & Associates, Inc.**

Sheet 1	Title - Cover Sheet
Sheet 2	Existing Conditions - Demolition Plan
Sheet 3	Site Development Plan
Sheet 4	Landscape Plan/E&S Control Plan
Sheet 5	Roadway Details
Sheet 6	Standard Details - Traffic Circulation
Sheet 7	Gabion Wall Details
Sheet 8	Erosion and Sedimentation Control Details (Sheet 1 of 2)
Sheet 9	Erosion and Sedimentation Control Details (Sheet 2 of 2)

**Drawings Arp Engineering**

B1	Floor Plan
B2	Building Elevations
B3	Building Elevations

## APPLICATION FOR PERMIT TO CONSTRUCT

### 1. GENERAL INFORMATION

This submittal is a permit amendment application for a permit to construct for the City of Fayetteville Transfer Station (Permit No. 26-09-T). Waste Industries, LLC and the City of Fayetteville are co-applicants and Waste Industries, LLC is the operator. The transfer station is an existing facility (to be modified) that is owned by the City of Fayetteville, North Carolina. This permit modification application was prepared by Richardson Smith Gardner & Associates, Inc. (RSG). Contact information for these parties is provided below. The required signature pages are provided in **Attachment A**.

#### **Waste Industries, LLC** (Applicant, Operator and Recipient of Invoices)

Local office (for invoices):  
Waste Industries, LLC  
4621 Marracco Dr.  
Hope Mills, NC 28348  
Phone: (910) 423-4122 x32428  
Fax: (910) 423-4125

Contact: Carl Massey, General Manager  
[carl.massey@wasteindustries.com](mailto:carl.massey@wasteindustries.com)

Main office (for authorized signature):  
Waste Industries, LLC  
3301 Benson Drive, Suite 601  
Raleigh, NC 27609  
Phone: (919) 325-3000  
Fax: (919) 325-4040

Contact: D. Stephen Grissom, CFO (Registered Agent)

#### **City of Fayetteville** (Owner)

City of Fayetteville  
433 Hay Street  
Fayetteville, NC 28301-5537  
Phone: (910) 433-1984  
Fax: (910) 433-1516

Contact: Gerald W. Dietzen, Solid Waste Director  
[gdietzen@ci.fay.nc.us](mailto:gdietzen@ci.fay.nc.us)

**Richardson Smith Gardner & Associates, Inc.** (Site Development Engineer)

Richardson Smith Gardner & Associates, Inc.  
14 N. Boylan Avenue  
Raleigh, North Carolina, NC 27603  
Phone: (919) 828-0577 x128  
Fax: (919) 828-3899

Contact: Thomas B. Maier, P.E.  
[tom@rsgengineers.com](mailto:tom@rsgengineers.com)

## **2. PROPERTY INFORMATION AND MAPS**

The facility is located at 583 Winslow Street, Fayetteville, North Carolina. **Figure 1** (Site Location Map) is a portion of a USGS topographic quadrangle map showing the property location and boundary. The facility is operating as a municipal solid waste (MSW) transfer station under North Carolina Solid Waste Permit 26-09-T. A copy of the current permit is provided in **Attachment B**.

The total property area is approximately 9.4 acres, of which approximately 4.5 acres will be used for the transfer operation. A legal description of the property and a copy of each land deed for the lots comprising the site is provided in **Attachment C**.

The siting of the facility is in compliance with all zoning and local laws, regulations, and ordinances, as confirmed by the letter from the City of Fayetteville provided in **Attachment D**. No structures will be located within the regulatory floodway, as shown on the FEMA Flood Insurance floodplain map provided in **Attachment E**, which includes the property boundary and location of the proposed transfer station building.

The proposed site development requires filling a small wetland area (0.06 acres). The 401/404 application and permit to fill the small wetland area are provided in **Attachment F**.

## **3. OPERATIONS PLAN**

The Operations Manual for the facility is provided in **Attachment G**. A copy of this manual will be kept on site and available for use at all times.

## **4. SEDIMENTATION AND EROSION CONTROL PLAN**

The Erosion and Sedimentation Control/Stormwater Plan for the facility is provided in **Attachment H**. This plan has been approved by the NCDENR Land Quality Section (for erosion and sedimentation control) and by the City of Fayetteville (for stormwater management).

## 5. FINANCIAL ASSURANCE

As required for existing facilities, Waste Industries, LLC will provide a financial assurance instrument soon after the permit is issued. Financial assurance calculations are provided in **Attachment I**.

## 6. TRAFFIC STUDY

Documentation from the City of Fayetteville Traffic Engineer that a traffic study is not required is provided in **Attachment J**.

## 7. SIGNATURE PAGES

The following required signature pages are provided in **Attachment A**:

- Applicant Signature Page; and
- Notarized Landowner Authorization Form.

## 8. ENGINEERING DRAWINGS

Engineering drawings are provided in **Attachment K**.

**ATTACHMENT A**  
**SIGNATURE PAGES**

Signature page of applicant -

REC'D MAY 18 2009

Name of facility Fayetteville Transfer Station

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision and that the information provided in this application is true, accurate, and complete to the best of my knowledge.

I understand that North Carolina General Statute 130A-22 provides for administrative penalties of up to fifteen thousand dollars (\$15,000.00) per day per each violation of the Solid Waste Management Rules. I further understand that the Solid Waste Management Rules may be revised or amended in the future and that the facility siting and operations of this solid waste management facility will be required to comply with all such revisions or amendments.

  
Signature

Carl D. Massey Jr  
Print Name

5-15-09  
Date

General Manager  
Title

Waste Industries - Hope Mills  
Business or organization name

Certification by Land Owner (if different from Applicant):

I hereby certify that I have read and understand the application submitted by

Waste Industries, LLC for a permit to operate a municipal solid waste transfer station on land owned by the undersigned located at (address) 583 Winslow Street; (city) Fayetteville, NC, in Cumberland County, and described in Deed Book and Page(s) PB 9 PG 20.

I specifically grant permission for the proposed municipal solid waste transfer station planned for operation within the confines of the land, as indicated in the permit application. I understand that any permit will be issued in the names of both the operator and the owner of the facility/property. I acknowledge that ownership of land on which a solid waste management facility is located may subject me to cleanup of said property in the event that the operator defaults as well as to liability under the federal Comprehensive Environmental Responsibility, Compensation and Liability Act ("CERCLA"). Without accepting any fault or liability, I recognize that ownership of land on which a solid waste management facility is located may subject me to claims from persons who may be harmed in their persons or property caused by the solid waste management facility.

I am informed that North Carolina General Statute 130A-22 provides for administrative penalties of up to fifteen thousand dollars (\$15,000) per day per each violation of the Solid Waste Management Rules. I understand that the Solid Waste Management Rules may be revised or amended in the future, and that the siting and operation of the facility will be required to comply with any such revisions or amendments.

Gerald W. Dietzen  
Signature

5/1/09  
Date

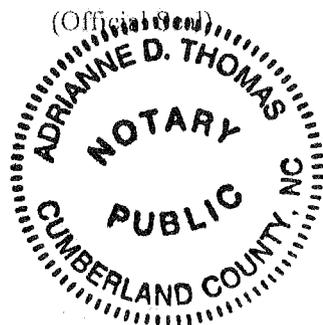
GERALD W. DIETZEN  
Print name

NORTH CAROLINA

Cumberland County

I, Adrienne Thomas, Notary Public for said County and State, do hereby certify that Gerald W. Dietzen personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 1st day of May, 2009



Adrienne D. Thomas  
Notary Public

My commission expires 3/15/2010.

**ATTACHMENT B**  
**CURRENT SOLID WASTE PERMIT**



North Carolina Department of Environment and Natural Resources

Division of Waste Management

Beverly Eaves Perdue  
Governor

Dexter R. Matthews  
Director

Dee Freeman  
Secretary

February 26, 2009

Gerald W. Dietzen  
Solid Waste Director  
City of Fayetteville  
455 Grove Street  
Fayetteville, NC 28301-0925

✓ John Pflieger  
Environmental & Safety Specialist  
Waste Industries  
3301 Benson Drive, Suite 601  
Raleigh, NC 27609

Re: Permit to Operate  
City of Fayetteville Transfer Station  
Cumberland County, North Carolina  
Permit No. 26-09T  
Doc ID No. 6890

Dear Mr. Pflieger:

Enclosed is the above referenced modified Permit to Operate that adds Lee, Moore, Richmond and Scotland Counties to the approved service area for the transfer station. Please review the document carefully and contact me with any discrepancies.

Also, please note that Condition 3 (Attachment 1, Part IV, page 3 of 9) requires you to record the permit on the property deed with the Cumberland County Register of Deeds. (Mr. Dietzen will receive the original for filing). Please call me with any questions regarding that process.

Thank your for your cooperation in this matter. If you have questions about the permit conditions or questions arise during operation, please contact either me at 919.508.8498 or Drew Hammonds, Environmental Senior Specialist for the facility, at 910.433.3351.

Sincerely,

Geoffrey H. Little  
NC-DENR Division of Waste  
Management Solid Waste Section  
2009.02.26 08:52:38 -05'00'

Geoffrey H. Little  
Environmental Engineer

c: Paul Crissman, DWM  
Ed Mussler, DWM

Drew Hammonds, DWM  
Ellen Lorscheider, DWM

Enclosure



North Carolina Department of Environment and Natural Resources

Division of Waste Management

Dexter R. Matthews

Director

Beverly Eaves Perdue  
Governor

Dee Freeman  
Secretary

STATE OF NORTH CAROLINA  
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES  
DIVISION OF WASTE MANAGEMENT  
SOLID WASTE SECTION

**SOLID WASTE TRANSFER FACILITY  
Permit No. 26-09T**

CITY OF FAYETTEVILLE, OWNER

and

WASTE INDUSTRIES, LLC, OPERATOR

are all hereby issued a

**PERMIT TO OPERATE**

CITY OF FAYETTEVILLE TRANSFER STATION

Located at 583 Winslow Street, City of Fayetteville, Cumberland County, North Carolina, in accordance with Article 9, Chapter 130A, of the General Statutes of North Carolina and all rules promulgated thereunder and subject to the conditions set forth in this permit. The legal description of the site is identified on the deeds recorded for this property listed in Attachment No. 1 of this permit.

Edward F. Mussler III, P.E.  
cn=Edward F. Mussler III,  
P.E., c=US, o=Division of  
Waste Management,  
ou=Solid Waste Section,  
email=ed.mussler@ncmail.  
net  
2009.02.25 14:58:11 -05'00'

Edward F. Mussler, III, P.E.,  
Permitting Branch Supervisor  
Solid Waste Section

ATTACHMENT 1

PART I: PERMITTING HISTORY

Permit Type	Date Issued
Original Issue Permit to Operate (PTO) No. 26-07T	June 8, 1994
Amendment No. 1	July 20, 1999
Original Issue Permit to Operate No. 26-09T	November 8, 2002
Amendment No. 1	May 31, 2007
PTO Service Area Modification	February 25, 2009

PART II: LIST OF DOCUMENTS FOR THE APPROVED PLAN

1. *Facility Operations Plans for the BFI Fayetteville Transfer Station.* May 3, 1994. [DIN 6877]
2. *Letter Requesting PTO Amendment including amended Lease Agreement.* Prepared by: BFI Waste Systems of North America, Inc. June 8, 1999. [DIN 6878]
3. *Waste Industries, Solid Waste Transfer Station, City of Fayetteville, Operation Plan.* Prepared by: Waste Industries, Inc., Raleigh, NC. May 29, 2007. [DIN 6874]
4. *Waste Industries, Solid Waste Transfer Station, City of Fayetteville, Request for Permit Amendment Letter.* Prepared by: Waste Industries, Inc., Raleigh, NC. February 26, 2007. [DIN 6874]
5. *Waste Industries, Solid Waste Transfer Station, City of Fayetteville, Request for Modification Letter.* Prepared by: Waste Industries, Inc., Raleigh, NC. August 11, 2008. [DIN 6869]

PART III: PROPERTIES APPROVED FOR THE SOLID WASTE FACILITY

Cumberland County NC Register of Deeds			
Book	Page	Grantor	Tract
3702	894	CSX Transportation, Inc.	9.4
			Total Site Acreage: 9.4

← Not Correct

#### PART IV: GENERAL PERMIT CONDITIONS

1. This permit expires May 31, 2012. Pursuant to 15A NCAC 13B .0201(g), no later than February 1, 2012, the owner or operator must submit a request to the North Carolina Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Section ("Section") for permit review and must update pertinent facility plans including but not limited to the facility operation and waste screening plans.
2. The persons to whom this permit is issued ("permittee") are the owners and operators of the solid waste management facility.
3. This permit shall not be effective until the certified copy of this permit which references legal descriptions for all land within the solid waste management facility boundary is recorded in the Register of Deeds office and indexed in the grantor index under the name of the owner of the land in the county or counties in which the land is located. The certified copy of the permit affixed with the Register's seal and the date, book, and page number of recording must be returned to the Section within 30 calendar days of issuance of this permit. If the Section does not receive the certified copy of the recorded permit within 30 calendar days of issuance of the permit, the permit is suspended and of no effect until the date the Section receives the certified copy of the recorded permit.
4. Intentionally Blank.
5. By receiving waste at this facility, the permittee shall be considered to have accepted the terms and conditions of this permit.
6. Operation of this solid waste management facility must be in accordance with the Solid Waste Management Rules, 15A NCAC 13B, Article 9 of the Chapter 130A of the North Carolina General Statutes (NCGS 130A-290, et seq.), the conditions contained in this permit; and the approved plan. Should the approved plan and the rules conflict, the Solid Waste Management Rules shall take precedence unless specifically addressed by permit condition.
7. This permit is issued based on the documents submitted in support of the application for permitting the facility including those identified in Attachment 1, "List of Documents for Approved Plan," and which constitute the approved plan for the facility. Where discrepancies exist, the most recent submittals and the Conditions of Permit shall govern.
8. This permit may be transferred only with the approval of the Section, through the issuance of a new or substantially amended permit in accordance with applicable statutes and rules. In accordance with NCGS 130A-295.2(g) the permittee shall notify the Section thirty (30) days prior to any significant change in the identity or business structure of either the owner or the operator, including but not limited to a proposed transfer of ownership of the facility or a change in the parent company of the owner or operator of the facility.

9. The permittee is responsible for obtaining all permits and approvals necessary for the development of this project including approval from appropriate agencies for a General or Individual NPDES Stormwater Discharge Permit. Issuance of this permit does not remove the permittee's responsibilities for compliance with any other local, state or federal rule, regulation or statute.

*- End of Section -*

**ATTACHMENT 2**  
**CONDITIONS OF PERMIT TO CONSTRUCT**

This Section is not applicable to this Permit.

**ATTACHMENT 3**  
**CONDITIONS OF OPERATING PERMIT**

**PART I: OPERATING CONDITIONS**

1. The facility is permitted to receive and transfer municipal solid waste as defined in G.S. 130A-290 (a)(35) to approved disposal facilities.
2. The following, at a minimum, must not be accepted for disposal at the facility: hazardous waste, yard waste, liquid wastes, regulated medical waste, sharps not properly packaged, animal carcasses, regulated-asbestos containing material as defined in 40 CFR 61, PCB waste as defined in 40 CFR 761, and wastes banned from disposal in North Carolina by G.S. 130A-309.10(f).
3. This facility is permitted to receive municipal solid waste generated within the following counties: Chatham, Durham, Franklin, Johnston, Lee, Moore, Orange, Richmond, Scotland and Wake and the municipalities contained within those counties. All waste must be transported for disposal to the Waste Industries Sampson County Disposal, Inc., municipal solid waste landfill Permit No. 82-02 located in Roseboro, Sampson County, North Carolina. Proposed changes to the service area or disposal facility must be approved by the Section and will be subject to a permit modification fee.
4. The permittee must not knowingly accept for transfer or cause the disposal of waste that is generated within the boundaries of a unit of local government that by ordinance:
  - a. Prohibits generators or collectors of waste from disposing of that type or form of waste.
  - b. Requires waste generators or collectors to recycle that type or form of waste.
5. A responsible individual trained and certified in facility operations must be on-site at all times during all operating hours of the facility, in accordance with G.S. 130A-309.25.
6. The permittee must develop, and use, a training and screening program at the facility for detecting and preventing unauthorized wastes from being accepted at the facility. At a minimum, the program must include:
  - a. Random inspections of incoming loads or other comparable procedures.
  - b. Records of all inspections.
  - c. Training of personnel to recognize hazardous, liquid and other excluded waste types.

- d. Development of a contingency plan to properly manage any identified hazardous, liquid or other excluded or unauthorized wastes. The plan must address identification, removal, storage and final disposition of those wastes.
7. The facility must not cause nuisance conditions.
- a. The tipping floor and transfer trailer loading area must be maintained in a clean, sanitary condition at all times and must be cleaned at least daily in accordance with the approved Operational Plan.
  - b. Waste must be deposited only on the tipping floor or directly into a transfer container. Waste must not be stored on the tipping floor after operating hours.
  - c. Waste may be stored on-site in leak proof transfer trailers with watertight covers a maximum of 24 hours except that a minimal amount of waste may be stored for a maximum of 72 hours when the facility is closed during a weekend or holiday. Storage of the waste must not cause any nuisance including odor, attraction of vectors, litter or other nuisance condition.
  - d. Effective vector control measures must be applied at all times to control any potential vector including flies, rodents, insects, and other vermin.
  - e. Control measures must be utilized to minimize and eliminate visible dust emissions and blowing litter.
    - i. Fugitive dust emissions are prohibited.
    - ii. Windblown materials must be collected by the end of the day and windblown material must not be allowed to leave the facility boundary.
8. All water that comes in contact with solid waste including vehicle wash-down water is leachate and must be captured and properly treated before release to the environment.
- a. The leachate control system, such as floor drains, leachate collection devices, sanitary sewer connections and leachate storage tanks, must be operational during facility operations.
  - b. The tipping floor must drain away from the building entrance and into the leachate collection system.
9. All sedimentation/erosion control activities must be conducted in accordance with the Sedimentation Control Act N.C.G.S. 113A-50, et seq., and rules promulgated there under at 15A NCAC 4.

10. Copies of this permit, the approved plans and all records required to be maintained by the permittee must be maintained at the facility unless otherwise approved by the Section and made available to the Section upon request during normal business hours.
11. The permittee must maintain a record of the amount of solid waste received at the facility, including daily records of waste received and origins of the loads. Scales must be used to weigh the amount of waste received. The daily records are to be summarized into a monthly report for use in the required annual reports.
12. On or before August 1 annually, the Permittee must submit an annual facility report to the Solid Waste Section on forms prescribed by the Section.
  - a. The reporting period shall be for the previous year beginning July 1 and ending June 30.
  - b. The annual facility report must list the amount of waste received in tons and be compiled:
    - i. On a monthly basis.
    - ii. By county, city or transfer station of origin.
    - iii. By specific waste type.
    - iv. By receiving disposal facility.
    - v. By diversion to alternative management facilities.
  - c. The completed report must be forwarded to the Regional Waste Management Specialist for the facility by the date due on the prescribed annual facility report form.
  - d. A copy of the completed report must be forwarded to each county manager for each county from which waste was received at the facility. Documentation that a copy of the report has been forwarded to the county managers must be sent to the Regional Waste Management Specialist by the date due on the prescribed annual facility report form.

PART II: MISCELLANEOUS SOLID WASTE MANAGEMENT CONDITIONS, (SPECIFY)  
(Not Applicable)

- End of Permit Conditions -

I do hereby certify that the attached PERMIT TO OPERATE is an exact and true original of PERMIT NUMBER 26-09T for the CITY OF FAYETTEVILLE Transfer Station.



Geoffrey H. Little  
Environmental Engineer II  
Solid Waste Section  
Division of Waste Management

North Carolina

WAKE County

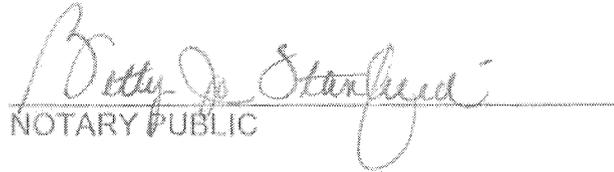
I, BETTY JO STANFIELD, Notary Public for WAKE County,

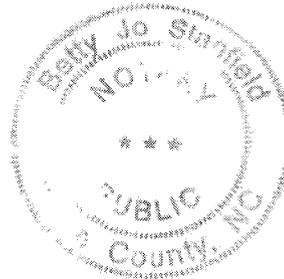
North Carolina, do hereby certify that Geoffrey H. Little, Environmental Engineer II of the Permitting Branch, Solid Waste Section, Division of Waste Management, NCDENR, personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal,

This the 26th day of FEBRUARY, 2009.

OFFICIAL SEAL

  
NOTARY PUBLIC



My commission expires DECEMBER 29, 2009.

Note to Register of Deeds: This certified original permit shall be recorded by the Register of Deeds and indexed in the grantor index under the name of the land owner. The certified original affixed with the Register's seal and the date, book, and page number of recording shall be returned to the Permitting Branch Supervisor, Division of Waste Management, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27899-1646.

**NOTICE**

**THE SPACE ABOVE IS FOR THE REGISTER OF DEEDS USE**

THIS PAGE IS PROVIDED FOR RECORDATION PURPOSES. THE ENTIRE DOCUMENT, INCLUDING THIS PAGE, SHOULD BE RECORDED IN THE GRANTOR INDEX UNDER THE NAME OF THE LANDOWNER FOR THE PARCEL OF PROPERTY LOCATED IN CUMBERLAND COUNTY AND SAID PROPERTY BEING OWNED BY CITY OF FAYETTEVILLE AND FURTHER IDENTIFIED BY THE DEEDS RECORDED AS LISTED BELOW:

<b>Cumberland County NC Register of Deeds</b>			
Book	Page	Grantor	Tract
3702	894	CSX Transportation, Inc.	9.4
			Total Site Acreage: 9.4

THE PURPOSE OF THIS RECORDATION IS TO NOTIFY FUTURE BUYERS OF SAID PROPERTY THAT SOLID WASTE MANAGEMENT ACTIVITIES HAVE OCCURRED ON THE PROPERTY.

**ATTACHMENT C**

**LAND DEEDS**

Land situated in Cross Creek Township, City of Fayetteville, Cumberland County, NC currently owned by the City of Fayetteville and being described as follows:

Being all of Lots 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46 and 47 of the Division of the E.A. Poe Estate as recorded in Map Book 9, Page 20 of the Cumberland County Register of Deeds and conveyed to the City of Fayetteville in the following Deed Books and Pages; Deed Book 2664 Page 611 (Lots 23, 33 and 43), Deed Book 2664 Page 601 (lot 40), Deed Book 26645 Page 606 (Lots 2, 3, 7, 18, 19, 25, 26, 27, 28, 29, 35, 36, 37, 38, 39, 45, 46, 47 and the Western ½ of Lot 4), Deed Book 2664 Page 600 (Lot 9), Deed Book 2666 Page 128 (Lot 30), Deed Book 2664 Page 610 (Lots 10, 11, 21, 22, 31 and 32), Deed Book 2664 Page 609 (Lots 8, 24, 34, 42 and 44), Deed Book 2664 Page 612 (Lots 5, 6, 20, 41 and the Eastern ½ of Lot 4), Deed Book 2664 Page 605 (Lot 30), along with the right-of-ways of Cole Street and Driver Street as recorded in Deed Book 2670 Page 713.

WARRANTY DEED - Form A-2

NORTH CAROLINA CUMBERLAND COUNTY  
THIS DEED, made this day of July, 1978, by

EGDAR ALLAN POE, III, and ~~WIFE~~ RUTH POE herein called Grantor,

*EM* *EM*

to CITY OF FAYETTEVILLE herein called Grantee,

all of said State and County,  
WITNESSETH THAT: Grantor, for ten dollars and other valuable considerations hereby acknowledged as paid and received, has bargained and sold, and by these presents does grant, bargain, sell and convey (subject to limitations, conditions, restrictions, and provisions - if any - listed below) to Grantee, his heirs, successors and assigns, certain land described as follows:  
NORTH CAROLINA .. COUNTY OF CUMBERLAND TOWNSHIP OF CROSS CREEK

All of Grantors' interests in Lot 9 in the Division of the E.A. Poe Estate, Map Book 9, Page 20, of the Cumberland County Registry.

For history of title see Deed Book 399, Page 468, Deed Book 573, Page 140 and Deed Book 809, Page 77 of the Cumberland County Registry.

At one time, certain lots on Map Book 9, Page 20 were in Pearces Mill Township.



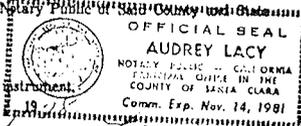
TO HAVE AND TO HOLD (subject to limitations, conditions, restrictions, and provisions - if any - listed above) said land and all privileges and appurtenances thereto belonging, to Grantee, his heirs, successors and assigns, forever.  
And Grantor covenants with Grantee that he is seized of said premises in fee and has right to convey in fee simple: that the same are free and clear of all encumbrances, (except those - if any - listed above), and that he does hereby forever warrant and will forever defend the title to the same against the lawful claims of all persons whomsoever.  
Wherever used herein, the singular shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders as the context may require.

IN TESTIMONY WHEREOF, Grantor, has signed and sealed this deed.  
*Edgar Allan Poe III* (SEAL) *Ruth Poe* (SEAL)  
EDGAR ALLAN POE, III (SEAL) RUTH POE (SEAL)

NORTH CAROLINA, CUMBERLAND COUNTY, I, *James V. Townsend*, a Notary Public of Said County and State do hereby certify that *Ruth Poe*

personally appeared before me this day and acknowledged the due execution of the foregoing instrument.  
WITNESS my hand and Notarial Seal, this the 17<sup>th</sup> day of July, 1978.  
My commission expires August 1, 1978. *James V. Townsend* Notary Public.

STATE OF California, COUNTY Santa Clara, I, *Audrey Lacy* do hereby certify that *Edgar Allan Poe III*



personally appeared before me this day and acknowledged the due execution of the foregoing instrument.  
WITNESS my hand and Notarial Seal, this the 14 day of July, 1978.  
My commission expires 11-14-81. *Audrey Lacy* Notary Public.

NORTH CAROLINA, CUMBERLAND COUNTY  
The foregoing or annexed certificate of *James V. Townsend + Audrey Lacy* Notary Public/Notaries Public is/are certified to be correct.  
This instrument was presented for registration and recorded in this Office at Book 2664, Page 600  
This 19 day of July, 1978 at 11:50 o'clock A.M.  
By *M. J. Barden* Deputy Register of Deeds

WARRANTY DEED - Form A-2

BOOK 2664 PAGE 601

NORTH CAROLINA CUMBERLAND

THIS DEED, made this day of June COUNTY, 1978, by

RAJAH A. ARAB and wife, JAMALE C. ARAB, RENEE AYSSE (Divorced),  
LINDA G. KANEKLIDES and husband, CONSTANTINO GEORGE KANEKLIDES, herein called Grantor,  
NADYA H. KANEKLIDES and husband, PAUL KANEKLIDES

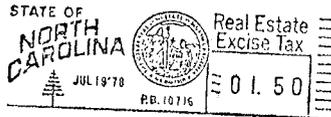
to all of said State and County, CITY OF FAYETTEVILLE herein called Grantee.

WITNESSETH THAT: Grantor, for ten dollars and other valuable considerations hereby acknowledged as paid and received, has bargained and sold, and by these presents does grant, bargain, sell and convey (subject to limitations, conditions, restrictions, and provisions - if any - listed below) to Grantee, his heirs, successors and assigns, certain land described as follows:  
NORTH CAROLINA .. COUNTY OF CUMBERLAND TOWNSHIP OF

All of Grantors' interests in Lot 40 in the Division of the E.A. Poe Estate, Map Book 9, Page 20, of the Cumberland County Registry.

For further history of title, see Deed Book 399, Page 468, Deed Book 402, Page 279, Deed Book 488, Page 113, Deed Book 488, Page 176, Deed Book 483, Page 55, Deed Book 1066, Page 406, Deed Book 2451, Page 277, of the Cumberland County Registry.

CUMBERLAND COUNTY  
072158



TO HAVE AND TO HOLD (subject to limitations, conditions, restrictions, and provisions - if any - listed above) said land and all privileges and appurtenances thereto belonging, to Grantee, his heirs, successors and assigns, forever.  
And Grantor covenants with Grantee that he is seized of said premises in fee and has right to convey in fee simple; that the same are free and clear of all encumbrances, (except those - if any - listed above), and that he does hereby forever warrant and will forever defend the title to the same against the lawful claims of all persons whomsoever.  
Wherever used herein, the singular shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders as the context may require.

IN TESTIMONY WHEREOF, Grantor has signed and sealed this deed.  
*Renee Aysse* (SEAL)  
*Nadya H. Kaneklides* (SEAL)  
*Paul Kaneklides* (SEAL)  
*Constantino George Kaneklides* (SEAL)  
*Jamale C. Arab* (SEAL)  
*Rajah A. Arab* (SEAL)  
*J. Ann... ..* (SEAL)

NORTH CAROLINA, Cumberland COUNTY  
I, do hereby certify that Rajah A. Arab and wife, Jamale C. Arab, Renee Aysse, Linda G. Kaneklides and husband, Constantino George Kaneklides, Nadya H. Kaneklides and husband, Paul Kaneklides personally appeared before me this day and acknowledged the due execution of the foregoing instrument.  
WITNESS my hand and Notarial Seal, this the day of 1978.  
My commission expires:

STATE OF North Carolina, COUNTY New Hanover  
I, Ruth Anne Friedrichs, a Notary Public of Said County and State, do hereby certify that Rajah A. Arab and wife, Jamale C. Arab personally appeared before me this day and acknowledged the due execution of the foregoing instrument.  
WITNESS my hand and Notarial Seal, this the 3rd day of July 1978.  
My commission expires: March 16, 1983

NORTH CAROLINA, CUMBERLAND COUNTY  
The foregoing or annexed certificate of Notary Public/Notaries Public is/are certified to be correct.  
This instrument was presented for registration and recorded in this Office at Book Page  
This day of 19 at O'clock M.  
Register of Deeds By Deputy Register of Deeds

WARRANTY DEED - Form A-2

BOOK 2664 PAGE 605

NORTH CAROLINA CUMBERLAND COUNTY  
THIS DEED, made this day of July, 19 78, by

SAMUEL C. RANKIN, VIRGINIA RANKIN YARBOROUGH, and  
husband RAYMOND YARBOROUGH herein called Grantor,

to CITY OF FAYETTEVILLE herein called Grantee,  
all of said State and County.

WITNESSETH THAT: Grantor, for ten dollars and other valuable considerations hereby acknowledged as paid and received, has bargained and sold, and by these presents does grant, bargain, sell and convey (subject to limitations, conditions, restrictions, and provisions - if any - listed below) to Grantee, his heirs, successors and assigns, certain land described as follows:  
NORTH CAROLINA .. COUNTY OF CUMBERLAND TOWNSHIP OF CROSS CREEK

All of Grantors' interests in Lot 30 in the Division of the E.A. Poe Estate, Map Book 9, Page 20, of the Cumberland County Registry.

For history of title see Deed Book 399, Page 468, Deed Book 438, Page 329, and Deed Book 442, Page 263 of the Cumberland County Registry. See also File Number 2116, Estates Division, Clerk of Superior Court, Cumberland County. Samuel C. Rankin was born October 5, 1959, and Charles Rankin died December 12, 1959.

At one time, certain lots on Map Book 9, Page 20 were in Pearces Mill Township.

Stamp: CUMBERLAND COUNTY 7215, STATE OF NORTH CAROLINA JUL 19 78, Real Estate Excise Tax 02.00, PB 10716

TO HAVE AND TO HOLD (subject to limitations, conditions, restrictions, and provisions - if any - listed above) said land and all privileges and appurtenances thereto belonging, to Grantee, his heirs, successors and assigns, forever. And Grantor covenants with Grantee that he is seized of said premises in fee and has right to convey in fee simple; that the same are free and clear of all encumbrances, (except those - if any - listed above), and that he does hereby forever warrant and will forever defend the title to the same against the lawful claims of all persons whomsoever.

Wherever used herein, the singular shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders as the context may require. IN TESTIMONY WHEREOF, Grantor has signed and sealed this deed.

Signatures: Samuel C. Rankin (SEAL), Virginia Rankin Yarborough (SEAL), Raymond Yarborough (SEAL)

NORTH CAROLINA, CUMBERLAND COUNTY  
I, JOEL S. JENKINS, a Notary Public of Said County and State do hereby certify that SAMUEL C. RANKIN personally appeared before me this day and acknowledged the due execution of the foregoing instrument. WITNESS my hand and Notarial Seal, this the 6 day of JULY, 19 78. My commission expires 10-13-80. Notary Public.

STATE OF NORTH CAROLINA, CUMBERLAND COUNTY  
I, JOEL S. JENKINS, a Notary Public of Said County and State do hereby certify that VIRGINIA RANKIN YARBOROUGH personally appeared before me this day and acknowledged the due execution of the foregoing instrument. WITNESS my hand and Notarial Seal, this the 6 day of JULY, 19 78. My commission expires 10-13-80. Notary Public.

NORTH CAROLINA, CUMBERLAND COUNTY  
The foregoing or annexed certificate of Joel S Jenkins Notary Public/Notaries Public in/are certified to be correct. This instrument was presented for registration and recorded in this Office at Book 2664, Page 605. This 19 day of July, 19 78 at 11:50 O'clock A.M. By: [Signature] Deputy Register of Deeds

WARRANTY DEED - Form A-2

NORTH CAROLINA CUMBERLAND COUNTY  
THIS DEED, made this day of July, 19 78, by

W.M. WELLS, JR., and wife DIXIE WELLS herein called Grantor,

to CITY OF FAYETTEVILLE herein called Grantee,  
all of said State and County.

WITNESSETH THAT: Grantor, for ten dollars and other valuable considerations hereby acknowledged as paid and received, has bargained and sold, and by these presents does grant, bargain, sell and convey (subject to limitations, conditions, restrictions, and provisions - if any - listed below) to Grantee, his heirs, successors and assigns, certain land described as follows:  
NORTH CAROLINA .. COUNTY OF CUMBERLAND TOWNSHIP OF CROSS CREEK

All of Grantors' interests in Lots 2, 3, 7, 18, 19, 25, 26, 27, 28, 29, 35, 36, 37, 38, 39, 45, 46, 47, and the western one-half of Lot 4 in the Division of the E.A. Poe Estate, Map Book 9, Page 20 of the Cumberland County Registry.

For history of title see Deed Book 399, Page 456, and Deed Book 525, Page 10, of the Cumberland County Registry. Also see File Numbers 69 E 238 and 70 E 651, Estates Division, Clerk of Superior Court, Cumberland County.

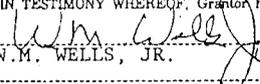
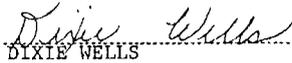
At one time, certain lots on Map Book 9, Page 20 were in Pearce's Mill Township

CUMBERLAND COUNTY 07215	STATE OF NORTH CAROLINA JUL 19 1978	Real Estate Excise Tax = 22.00
	PB. 10716	

TO HAVE AND TO HOLD (subject to limitations, conditions, restrictions, and provisions - if any - listed above) said land and all privileges and appurtenances thereto belonging, to Grantee, his heirs, successors and assigns, forever.  
And Grantor covenants with Grantee that he is seized of said premises in fee and has right to convey in fee simple: that the same are free and clear of all encumbrances, (except those - if any - listed above), and that he does hereby forever warrant and will forever defend the title to the same against the lawful claims of all persons whomsoever.

Wherever used herein, the singular shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders as the context may require.

IN TESTIMONY WHEREOF, Grantor has signed and sealed this deed.

 (SEAL)       (SEAL)  
 W.M. WELLS, JR.      DIXIE WELLS  
 \_\_\_\_\_ (SEAL)      \_\_\_\_\_ (SEAL)  
 \_\_\_\_\_ (SEAL)      \_\_\_\_\_ (SEAL)

NORTH CAROLINA, I, BRUCE D. ALERS, a Notary Public of Said County and State do hereby certify that W.M. WELLS, JR. AND DIXIE WELLS

personally appeared before me this day and acknowledged the due execution of the foregoing instrument.  
WITNESS my hand and Notarial Seal, this the 7<sup>th</sup> day of JULY, 19 78.  
My commission expires: JUL 06 1982  
Bruce D. Alers  
Notary Public.

STATE OF \_\_\_\_\_, COUNTY \_\_\_\_\_, a Notary Public of Said County and State do hereby certify that

personally appeared before me this day and acknowledged the due execution of the foregoing instrument.  
WITNESS my hand and Notarial Seal, this the \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_.  
My commission expires: \_\_\_\_\_  
\_\_\_\_\_  
Notary Public.

NORTH CAROLINA, CUMBERLAND COUNTY of Bruce D. Alers  
 The foregoing or annexed certificate  
 Notary Public/Notaries Public is/are certified to be correct.  
 This instrument was presented for registration and recorded in this Office at Book 2664 Page 606  
 This 19 day of July, 1978 at 11:50 O'clock A.M.  
 By:  Deputy-Register of Deeds  
 Register of Deeds

BOOK 2664 PAGE 609

WARRANTY DEED - Form A-2

NORTH CAROLINA CUMBERLAND COUNTY  
THIS DEED, made this day of July, 1978, by

RUTH PAXTON herein called Grantor.

CITY OF FAYETTEVILLE herein called Grantee.

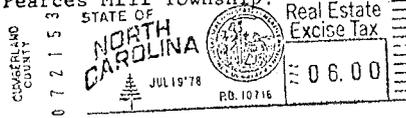
to all of said State and County.

WITNESSETH THAT: Grantor, for ten dollars and other valuable considerations hereby acknowledged as paid and received, has bargained and sold, and by these presents does grant, bargain, sell and convey (subject to limitations, conditions, restrictions, and provisions - if any - listed below) to Grantee, his heirs, successors and assigns, certain land described as follows:  
NORTH CAROLINA .. COUNTY OF CUMBERLAND TOWNSHIP OF CROSS CREEK

All of Grantor's interest in Lots 8, 24, 34, 42, and 44 in the Division of the E.A. Poe Estate, Map Book 9, Page 20 of the Cumberland County Registry.

For history of title see Deed Book 399, Page 423, Deed Book 593, Page 272 and Deed Book 800, Page 173 of the Cumberland County Registry. See also File Number 66 E 782, Estates Division, Clerk of Superior Court, Cumberland County.

At one time, certain lots on Map Book 9, Page 20 were in Pearce Mill Township.



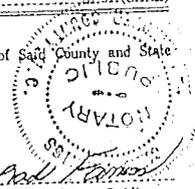
TO HAVE AND TO HOLD (subject to limitations, conditions, restrictions, and provisions - if any - listed above) said land and all privileges and appurtenances thereto belonging, to Grantee, his heirs, successors and assigns, forever. And Grantor covenants with Grantee that he is seized of said premises in fee and has right to convey in fee simple: that the same are free and clear of all encumbrances, (except those - if any - listed above), and that he does hereby forever warrant and will forever defend the title to the same against the lawful claims of all persons whomsoever.

Wherever used herein, the singular shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders as the context may require.

IN TESTIMONY WHEREOF, Grantor has signed and sealed this deed.

.....(SEAL) *Ruth Paxton*.....(SEAL)  
RUTH PAXTON .....(SEAL)  
.....(SEAL) .....(SEAL)

NORTH CAROLINA, NEW HANOVER COUNTY  
I, CHAD FARRISS  
do hereby certify that RUTH PAXTON



personally appeared before me this day and acknowledged the due execution of the foregoing instrument.  
WITNESS my hand and Notarial Seal, this the 14 day of JULY, 1978.  
My commission expires: 2-18-81  
.....(Signature).....  
Notary Public.

STATE OF \_\_\_\_\_ COUNTY \_\_\_\_\_  
I, \_\_\_\_\_  
do hereby certify that

personally appeared before me this day and acknowledged the due execution of the foregoing instrument.  
WITNESS my hand and Notarial Seal, this the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.  
My commission expires: \_\_\_\_\_  
.....(Signature).....  
Notary Public.

NORTH CAROLINA, CUMBERLAND COUNTY  
The foregoing or annexed certificate of Chad Farriss  
Notary Public/Notaries Public is/are certified to be correct.  
This instrument was presented for registration and recorded in this Office at Book 2664, Page 609.  
This 19 day of July, 1978 at 11:50 O'clock A.M.  
By: *Mildred J. Barden* Deputy Register of Deeds

WARRANTY DEED - Form A-2

NORTH CAROLINA CUMBERLAND COUNTY  
THIS DEED, made this day of July, 1978, by

WILLIAM HEDGEPEETH, and wife MONTARIE PORTER HEDGEPEETH herein called Grantor,

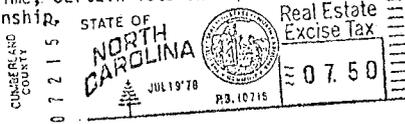
to CITY OF FAYETTEVILLE herein called Grantee,  
all of said State and County.

WITNESSETH THAT: Grantor, for ten dollars and other valuable considerations hereby acknowledged as paid and received, has bargained and sold, and by these presents does grant, bargain, sell and convey (subject to limitations, conditions, restrictions, and provisions - if any - listed below) to Grantee, his heirs, successors and assigns, certain land described as follows:  
NORTH CAROLINA .. COUNTY OF CUMBERLAND TOWNSHIP OF CROSS CREEK

All of Grantors' interest in Lots 10, 11, 21, 22, 31 and 32 in the Division of the E.A. Poe Estate, Map Book 9, Page 20 of the Cumberland County Registry.

For history of title see Deed Book 399, Page 462, and Deed Book 557, Page 12 of the Cumberland County Registry. See also File Number 74 E 349, Estates Division, Clerk of Superior Court, Cumberland County, and Paragraph #13 of the will of Helen Hedgepeth contained therein.

At one time, certain lots on Map Book 9, Page 20 were in Pearces Mill Township,



TO HAVE AND TO HOLD (subject to limitations, conditions, restrictions, and provisions - if any - listed above) said land and all privileges and appurtenances thereto belonging, to Grantee, his heirs, successors and assigns, forever. And Grantor covenants with Grantee that he is seized of said premises in fee simple; that the same are free and clear of all encumbrances, (except those - if any - listed above), and that he does hereby forever warrant and will forever defend the title to the same against the lawful claims of all persons whomsoever. Wherever used herein, the singular shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders as the context may require.

IN TESTIMONY WHEREOF, Grantor has signed and sealed this deed.

William Hedgepeth (SEAL) Montarie Porter Hedgepeth (SEAL)  
WILLIAM HEDGEPEETH MONTARIE PORTER HEDGEPEETH  
(SEAL) (SEAL)  
(SEAL) (SEAL)

NORTH CAROLINA, STATE OF MARYLAND COUNTY OF MONTGOMERY  
I, WILLARD W. WILEY, a Notary Public of Said County and State  
do hereby certify that WILLIAM HEDGEPEETH AND MONTARIE PORTER HEDGEPEETH

personally appeared before me this day and acknowledged the due execution of the foregoing instrument.  
WITNESS my hand and Notarial Seal, this the 19th day of July, 1978.  
My commission expires: 7-1-88 Notary Public.

STATE OF \_\_\_\_\_, COUNTY \_\_\_\_\_, a Notary Public of Said County and State  
I, \_\_\_\_\_  
do hereby certify that

personally appeared before me this day and acknowledged the due execution of the foregoing instrument.  
WITNESS my hand and Notarial Seal, this the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.  
My commission expires: \_\_\_\_\_ Notary Public.

NORTH CAROLINA, CUMBERLAND COUNTY of Willard W. Wiley  
The foregoing or annexed certificate  
Notary Public/Notaries Public is/are certified to be correct.  
This instrument was presented for registration and recorded in this Office at Book 2664, Page 610  
This 19 day of July, 1978 at 11:50 o'clock A.M.  
By: Michael L. Sanders, Deputy Register of Deeds

WARRANTY DEED - Form A-2

BOOK 2664 PAGE 611

NORTH CAROLINA CUMBERLAND COUNTY  
THIS DEED, made this 10th day of July, 1978, by

JOSEPHINE POE JONES  
BY HER ATTORNEY-IN-FACT, JOSEPHINE JONES McCALL herein called Grantor.

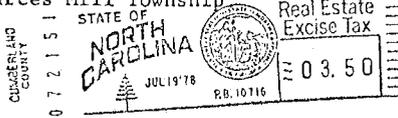
to  
all of said State and County, CITY OF FAYETTEVILLE herein called Grantee.

WITNESSETH THAT: Grantor, for ten dollars and other valuable considerations hereby acknowledged as paid and received, has bargained and sold, and by these presents does grant, bargain, sell and convey (subject to limitations, conditions, restrictions, and provisions - if any - listed below) to Grantee, his heirs, successors and assigns, certain land described as follows:  
NORTH CAROLINA .. COUNTY OF CUMBERLAND TOWNSHIP OF CROSS CREEK

All of Grantor's interests in Lots 23, 33, and 43 in the Division of the E.A. Poe Estate, Map Book 9, Page 20 of the Cumberland County Registry.

For history of title see Deed Book 399, Page 438 of the Cumberland County Registry.

At one time, certain lots on Map Book 9, Page 20 were in Pearces Mill Township



TO HAVE AND TO HOLD (subject to limitations, conditions, restrictions, and provisions - if any - listed above) said land and all privileges and appurtenances thereto belonging, to Grantee, his heirs, successors and assigns, forever.  
And Grantor covenants with Grantee that he is seized of said premises in fee and has right to convey in fee simple: that the same are free and clear of all encumbrances, (except those - if any - listed above), and that he does hereby forever warrant and will forever defend the title to the same against the lawful claims of all persons whomsoever.  
Wherever used herein, the singular shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders as the context may require.  
IN TESTIMONY WHEREOF, Grantor has signed and sealed this deed.

.....(SEAL) Joseph P. Poe (SEAL)  
.....(SEAL) JOSEPHINE JONES  
.....(SEAL) JOSEPHINE JONES McCALL, Attorney-in-Fact  
.....(SEAL) for Josephine Poe Jones (SEAL)

NORTH CAROLINA - CUMBERLAND COUNTY  
I, LINDA D. DEESE, a Notary Public of said County and State do hereby certify that JOSEPHINE JONES McCALL, attorney-in-fact for JOSEPHINE POE JONES, personally appeared before me this day, and being by me duly sworn, says that she executed the foregoing and annexed instrument for and in behalf of JOSEPHINE POE JONES, and that her authority to execute and acknowledge said instrument is contained in an instrument duly executed, acknowledged and recorded in the office of the Register of Deeds of Cumberland County, North Carolina, on July 6, 1978, recorded in Book 2662, Page 629, and that this instrument was executed under and by virtue of the authority given by said instrument granting her power of attorney; that the said JOSEPHINE JONES McCALL acknowledged the due execution of the foregoing and annexed instrument for the purposes therein expressed for and in behalf of the said JOSEPHINE POE JONES.

WITNESS my hand and official seal, this 10th day of July, 1978.  
My Commission expires: February 16, 1981  
Linda D. Deese  
NOTARY PUBLIC

NORTH CAROLINA, CUMBERLAND COUNTY  
The foregoing or annexed certificate of Linda D. Deese  
Notary Public/Notaries Public is/are certified to be correct.  
This instrument was presented for registration and recorded in this Office at Book 2664, Page 411  
This 19 day of July, 1978 at 11:50 O'clock A.M.  
By: [Signature] J. H. Adams, Jr.  
Register of Deeds Deputy Register of Deeds

WARRANTY DEED - Form A-2

NORTH CAROLINA CUMBERLAND COUNTY  
THIS DEED, made this 6th day of July, 1978, by

ELIZABETH POE /W. herein called Grantor,

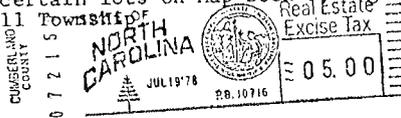
to CITY OF FAYETTEVILLE herein called Grantee,  
all of said State and County,

WITNESSETH THAT: Grantor, for ten dollars and other valuable considerations hereby acknowledged as paid and received, has bargained and sold, and by these presents does grant, bargain, sell and convey (subject to limitations, conditions, restrictions, and provisions - if any - listed below) to Grantee, his heirs, successors and assigns, certain land described as follows:  
NORTH CAROLINA .. COUNTY OF CUMBERLAND TOWNSHIP OF CROSS CREEK

All of Grantor's interest in Lots 5, 6, 20, 41 and eastern one-half of Lot 4 in the Division of the E.A. Poe Estate, Map Book 9, Page 20 of the Cumberland Country Registry.

For history of title see Deed Book 399, Page 434, Deed Book 402, Page 111, Deed Book 439, Page 50, and Deed Book 540, Page 101 of the Cumberland County Registry.

At one time, certain lots on Map Book 9, Page 20 were in Pearces Mill Township of



TO HAVE AND TO HOLD (subject to limitations, conditions, restrictions, and provisions - if any - listed above) said land and all privileges and appurtenances thereto belonging, to Grantee, his heirs, successors and assigns, forever. And Grantor covenants with Grantee that he is seized of said premises in fee and has right to convey in fee simple; that the same are free and clear of all encumbrances, (except those - if any - listed above), and that he does hereby forever warrant and will forever defend the title to the same against the lawful claims of all persons whomsoever. Wherever used herein, the singular shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders as the context may require. IN TESTIMONY WHEREOF, Grantor has signed and sealed this deed.

.....(SEAL) Elizabeth W. Poe (SEAL)  
ELIZABETH POE (SEAL)  
/W. (SEAL)  
.....(SEAL) (SEAL)

NORTH CAROLINA CUMBERLAND COUNTY  
Linda D. Deese, a Notary Public of Said County and State  
do hereby certify that Elizabeth W. Poe  
personally appeared before me this day and acknowledged the due execution of the foregoing instrument.  
WITNESS my hand and Notarial Seal, this the 6th day of July, 1978.  
My commission expires: February 16, 1981 Linda D. Deese  
Notary Public.

STATE OF \_\_\_\_\_, COUNTY \_\_\_\_\_, a Notary Public of Said County and State  
I, \_\_\_\_\_ do hereby certify that

personally appeared before me this day and acknowledged the due execution of the foregoing instrument.  
WITNESS my hand and Notarial Seal, this the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.  
My commission expires: \_\_\_\_\_ Notary Public.

NORTH CAROLINA, CUMBERLAND COUNTY of Linda D. Deese  
The foregoing or annexed certificate of \_\_\_\_\_  
Notary Public/Notaries Public, is/are certified to be correct.  
This instrument was presented for registration and recorded in this Office at Book 2664, Page 612  
This 19 day of July, 1978 at 11:57 O'clock A.M.  
By: Marjorie Clark, Register of Deeds; J. R. ... Deputy-Register of Deeds

WARRANTY DEED - Form A-2

NORTH CAROLINA CUMBERLAND COUNTY  
THIS DEED, made this day of July, 19 78, by

SAMUEL C. RANKIN, VIRGINIA RANKIN YARBOROUGH, and  
husband RAYMOND YARBOROUGH herein called Grantor,

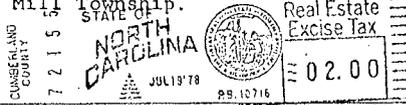
to CITY OF FAYETTEVILLE herein called Grantee,  
all of said State and County,

WITNESSETH THAT: Grantor, for ten dollars and other valuable considerations hereby acknowledged as paid and received, has bargained and sold, and by these presents does grant, bargain, sell and convey (subject to limitations, conditions, restrictions, and provisions - if any - listed below) to Grantee, his heirs, successors and assigns, certain land described as follows:  
NORTH CAROLINA -- COUNTY OF CUMBERLAND TOWNSHIP OF CROSS CREEK

All of Grantors' interests in Lot 30 in the Division of the E.A. Poe Estate, Map Book 9, Page 20, of the Cumberland County Registry.

For history of title see Deed Book 399, Page 468, Deed Book 438, Page 329, and Deed Book 442, Page 263 of the Cumberland County Registry. See also File Number 2116, Estates Division, Clerk of Superior Court, Cumberland County. Samuel C. Rankin was born October 5, 1959, and Charles Rankin died December 12, 1959.

At one time, certain lots on Map Book 9, Page 20 were in Pearces Mill Township.



TO HAVE AND TO HOLD (subject to limitations, conditions, restrictions, and provisions - if any - listed above) said land and all privileges and appurtenances thereto belonging, to Grantee, his heirs, successors and assigns, forever.  
And Grantor covenants with Grantee that he is seized of said premises in fee and has right to convey in fee simple: that the same are free and clear of all encumbrances, (except those - if any - listed above), and that he does hereby forever warrant and will forever defend the title to the same against the lawful claims of all persons whomsoever.

Wherever used herein, the singular shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders as the context may require.

IN TESTIMONY WHEREOF, Grantor has signed and sealed this deed.

SAMUEL C. RANKIN (SEAL)  
VIRGINIA RANKIN YARBOROUGH (SEAL)  
RAYMOND YARBOROUGH (SEAL)

NORTH CAROLINA, CUMBERLAND COUNTY  
I, JOEL S. JENKINS, a Notary Public of Said County and State

do hereby certify that SAMUEL C. RANKIN

personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

WITNESS my hand and Notarial Seal, this the 6 day of JULY, 19 78.  
My commission expires 10-13-80. [Signature]

STATE OF NORTH CAROLINA, CUMBERLAND COUNTY  
I, JOEL S. JENKINS, a Notary Public of Said County and State

do hereby certify that VIRGINIA RANKIN YARBOROUGH and

personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

WITNESS my hand and Notarial Seal, this the 6 day of JULY, 19 78.  
My commission expires 10-13-80. [Signature]

NORTH CAROLINA, CUMBERLAND COUNTY

The foregoing or annexed certificate of Joel S Jenkins of Notary Public/Notaries Public is/are certified to be correct.  
This instrument was presented for registration and recorded in this Office at Book 2666, Page 605.  
This 19 day of July, 19 78 at 11:50 O'clock A.M.  
By Marlon Clark, Register of Deeds and Michael J. Sanders, Deputy Register of Deeds

NORTH CAROLINA, CUMBERLAND COUNTY  
The foregoing or annexed certificate of Joel S Jenkins of Notary Public/Notaries Public is/are certified to be correct.

This instrument was presented for registration and recorded in this Office at Book 2666, Page 605.  
This 26 day of July, 19 78 at 10:15 O'clock A.M.  
By Marlon Clark, Register of Deeds and Peggy J. McLean, Deputy Register of Deeds

**ATTACHMENT D**  
**CITY OF FAYETTEVILLE COMPLIANCE**



REC'D MAY 14 2009

May 12, 2009

Mr. Ed Mussler, P.E.  
Branch Head  
NCDENR Division of Waste Management  
Permitting Branch  
1646 Mail Service Center  
Raleigh, NC 27699-1646

***RE: Fayetteville Transfer Station – Compliance with Local Requirements***

Dear Mr. Mussler,

The site of the City of Fayetteville Transfer Station is within the City of Fayetteville and is subject to the ordinances of the City of Fayetteville. The siting of the facility is in conformance with all zoning and local laws, regulations, and ordinances.

Sincerely,

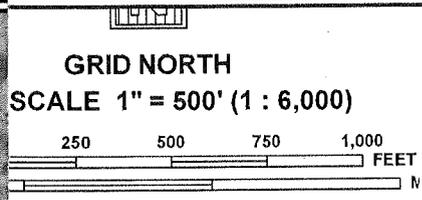
A handwritten signature in black ink, appearing to read "Jeffery P. Brown".

Jeffery P. Brown, P.E.  
City Engineer

CC: Jerry Dietzen, Solid Waste Management Director  
Carl Massey, Waste Industries  
Thomas Maier, Richardson Smith Gardner & Associates  
File



**ATTACHMENT E**  
**FLOODPLAIN COMPLIANCE**



PANEL 0437J

# M INSURANCE RATE MAP NORTH CAROLINA

**0437**  
FOR DIAGRAM OR MAP INDEX FOR FIRM PANEL

	CID No.	PANEL	SUFFIX
COUNTY	370076	0437	J
CITY OF	370077	0437	J

The Map Number shown below should be used for map orders; the Community Number shown above used on insurance applications for the subject

**ISSUANCE DATE**      **MAP NUMBER**  
**MAY 5, 2007**      **3720043700J**



State of North Carolina  
Emergency Management Agency

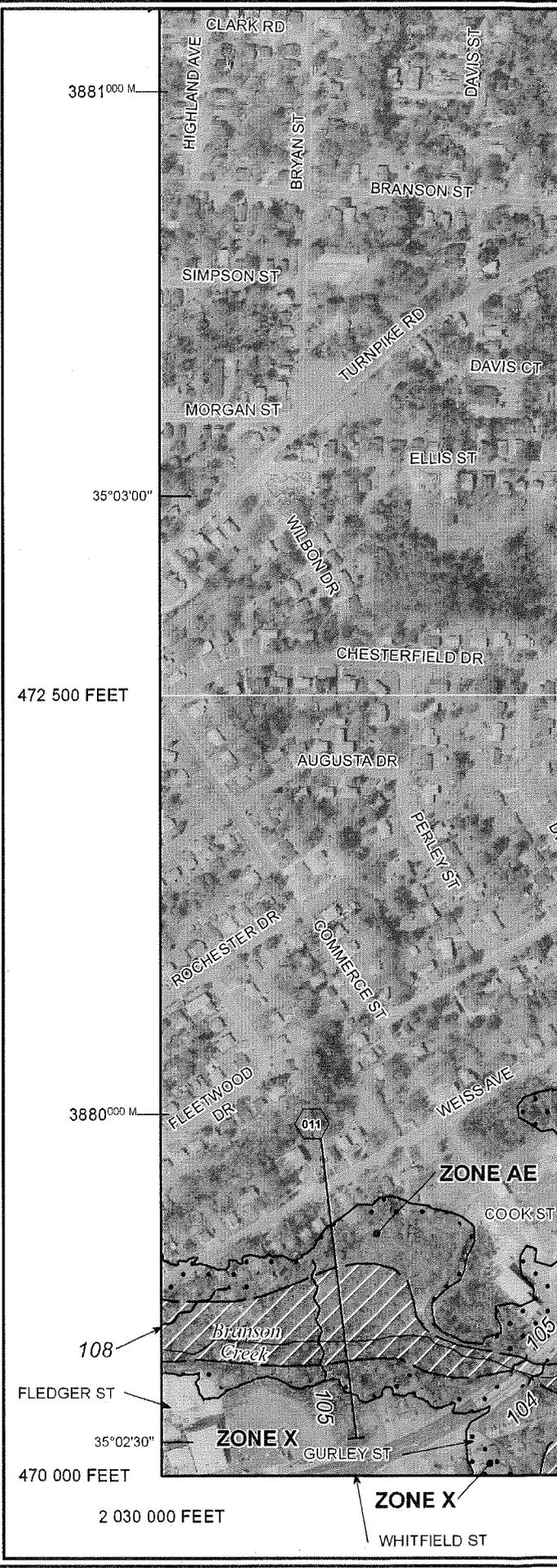
copy of a portion of the above referenced flood map. It is not to be used for anything other than F-MIT On-Line. This map does not reflect changes which may have been made subsequent to the date on the map. For the latest product information about National Flood Insurance Program, please check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

**RICHARDSON SMITH GARDNER & ASSOCIATES**  
 www.rsgengineers.com  
 14 N. Boylan Ave. Raleigh, N.C. 27603  
 ph: 919-528-0577  
 fax: 919-528-3899

FIGURE NO.	1	FILE NAME	WI-B0553
SCALE:	AS SHOWN	PROJECT NO.	FAYETTEVILLE 09-1
CHECKED BY:	T.B.M.	DATE:	Mar. 2009
DRAWN BY:	C.T.J.		

**CITY OF FAYETTEVILLE  
TRANSFER STATION  
PERMIT RENEWAL APPLICATION  
FLOODPLAIN COMPLIANCE**

G:\CAD\Waste...ustries\Fayetteville 07-1\sheets\WI-B0553.dwg - 3/3/2009 11:12 AM



**ATTACHMENT F**  
**WETLANDS COMPLIANCE**

**U.S. ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT**

Action ID: SAW-2008-02816

County: Cumberland

USGS Quad: Fayetteville

**GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION**

Applicant: Mr. Steve Grissom  
Waste Industries, LLC  
Address: 3301 Benson Drive, Suite 601  
Raleigh, NC 27609

Mr. Phil May  
Carolina Ecosystems, Inc.  
8208 Brian Court  
Garner, NC 27529

Telephone No.: 919-325-3000

919-606-1065

Size and location of property (water body, road name/number, town, etc.): The property is adjacent to Blount's Creek and is located at the southwest intersection of Pine Street and Winslow Street, east of Robeson Street, in Fayetteville, Cumberland County, North Carolina.

Description of projects area and activity: City of Fayetteville Transfer Station. This permit authorizes the discharge of fill material into 0.06 acres of wetlands for the construction of a road, storage area and maneuvering area for the expansion of a solid waste transfer station.

Applicable Law:  Section 404 (Clean Water Act, 33 USC 1344)  
 Section 10 (Rivers and Harbors Act, 33 USC 403)

Authorization: Regional General Permit Number: \_\_\_\_\_  
Nationwide Permit Number: 18

**Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions and your submitted plans. Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order and/or appropriate legal action.**

This verification will remain valid until the expiration date identified below unless the nationwide authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide permit authorization is reissued and/or modified, this verification will remain valid until the expiration date identified below, provided it complies with all requirements of the modified nationwide permit. If the nationwide permit authorization expires or is suspended, revoked, or is modified, such that the activity would no longer comply with the terms and conditions of the nationwide permit, activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon the nationwide permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide permit's expiration, modification or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend or revoke the authorization.

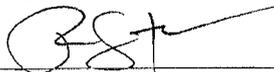
Activities subject to Section 404 (as indicated above) may also require an individual Section 401 Water Quality Certification. You should contact the NC Division of Water Quality (telephone (919) 733-1786) to determine Section 401 requirements.

For activities occurring within the twenty coastal counties subject to regulation under the Coastal Area Management Act (CAMA), prior to beginning work you must contact the N.C. Division of Coastal Management .

This Department of the Army verification does not relieve the permittee of the responsibility to obtain any other required Federal, State or local approvals/permits.

If there are any questions regarding this verification, any of the conditions of the Permit, or the Corps of Engineers regulatory program, please contact Ronnie Smith at 910-251-4829.

Corps Regulatory Official: Ronnie Smith



Date: May 18, 2009

Expiration Date of Verification: May 18, 2009

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the attached customer Satisfaction Survey or visit <http://www.saw.usace.army.mil/WETLANDS/index.html> to complete the survey online.

**Determination of Jurisdiction:**

- Based on preliminary information, there appear to be waters of the US including wetlands within the above described project area. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process ( Reference 33 CFR Part 331).
- There are Navigable Waters of the United States within the above described project area subject to the permit requirements of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- There are waters of the US and/or wetlands within the above described project area subject to the permit requirements of Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- The jurisdictional areas within the above described project area have been identified under a previous action. Please reference jurisdictional determination issued February 9, 2006 with Action ID Number 2005001193 .

Basis of Jurisdictional Determination: This site exhibits wetland criteria as described in the 1987 Corps Wetland Delineation Manual and is adjacent to Blount's Creek, a tributary of Cross Creek, a tributary of the Cape Fear River, which is a navigable water of the United States. This determination is based on information provided by Carolina Ecosystems, Inc.

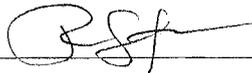
**Appeals Information (This information applies only to approved jurisdictional determinations.)**

Attached to this verification is an approved jurisdictional determination. If you are not in agreement with that approved jurisdictional determination, you can make an administrative appeal under 33 CFR 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the following address:

District Engineer, Wilmington Regulatory Division  
Attn: Ronnie Smith, Project Manager,  
Wilmington Regulatory Field Office  
PO Box 1890  
Wilmington, North Carolina 28402

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the District Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by July 17, 2009.

**\*\*It is not necessary to submit an RFA form to the District Office if you do not object to the determination in this correspondence.\*\***

Corps Regulatory Official: Ronnie Smith 

Date: May 18, 2009 Expiration Date: May 18, 2014

**SURVEY PLATS, FIELD SKETCH, WETLAND DELINEATION FORMS, PROJECT PLANS, ETC., MUST BE ATTACHED TO THE FILE COPY OF THIS FORM, IF REQUIRED OR AVAILABLE.**

Copy Furnished:

Mr. Jerry Dietzen  
City of Fayetteville  
433 Hay Street  
Fayetteville, NC 28301

Mr. Chad Turlington  
NCDENR-DWQ  
225 Green Street, Suite 714  
Fayetteville, NC 28301

Mr. Ian McMillan  
NCDENR-DWQ  
1650 Mail Service Center  
Raleigh, NC 27699

Action ID Number: SAW-2008-02816

County: Cumberland

Permittee: Waste Industries, LLC

Date Verification Issued: May 18, 2009

Project Manager: Ronnie Smith

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

US ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT  
WILMINGTON REGULATORY FIELD OFFICE  
POST OFFICE BOX 1890  
WILMINGTON, NORTH CAROLINA 28402-1890

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and condition of the said permit, and required mitigation was completed in accordance with the permit conditions.

\_\_\_\_\_  
Signature of Permittee

\_\_\_\_\_  
Date

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL**

Applicant: Waste Industries, LLC	File Number: 2008-02816	Date: May 18, 2009
Attached is: signed survey		See Section below
<input type="checkbox"/> INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
<input type="checkbox"/> PROFFERED PERMIT (Standard Permit or Letter of permission)		B
<input type="checkbox"/> PERMIT DENIAL		C
<input checked="" type="checkbox"/> APPROVED JURISDICTIONAL DETERMINATION		D
<input type="checkbox"/> PRELIMINARY JURISDICTIONAL DETERMINATION		E

**SECTION I -** The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://www.usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

**A: INITIAL PROFFERED PERMIT:** You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

**B: PROFFERED PERMIT:** You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**D: APPROVED JURISDICTIONAL DETERMINATION:** You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the district engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**E: PRELIMINARY JURISDICTIONAL DETERMINATION:** You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

**SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

**REASONS FOR APPEAL OR OBJECTIONS:** (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

**ADDITIONAL INFORMATION:** The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

**POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

If you have questions regarding this decision and/or the appeal process you may contact:

Ronnie Smith  
USAED-RG  
PO Box 1890  
Wilmington, NC 28402

If you only have questions regarding the appeal process you may also contact:

Mr. Mike Bell, Administrative Appeal Review Officer  
CESAD-ET-CO-R  
U.S. Army Corps of Engineers, South Atlantic Division  
60 Forsyth Street, Room 9M15  
Atlanta, Georgia 30303-8801

**RIGHT OF ENTRY:** Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.	Date:	Telephone number:
----------------------------------	-------	-------------------

**For appeals on Initial Proffered Permits and approved Jurisdictional Determinations send this form to:**

**District Engineer, Wilmington Regulatory Division, Attn: Ronnie Smith, Project Manager, Wilmington Regulatory Field Office, PO Box 1890, Wilmington, North Carolina 28402**





**NATIONWIDE PERMIT 18**  
**DEPARTMENT OF THE ARMY**  
**CORPS OF ENGINEERS**  
**FINAL NOTICE OF ISSUANCE AND MODIFICATION OF NATIONWIDE PERMITS**  
**FEDERAL REGISTER**  
**AUTHORIZED MARCH 19, 2007**

**Minor Discharges.** Minor discharges of dredged or fill material into all waters of the United States, provided the activity meets all of the following criteria:

(a) The quantity of discharged material and the volume of area excavated do not exceed 25 cubic yards below the plane of the ordinary high water mark or the high tide line;

(b) The discharge will not cause the loss of more than 1/10 acre of waters of the United States; and

(c) The discharge is not placed for the purpose of a stream diversion.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) The discharge or the volume of area excavated exceeds 10 cubic yards below the plane of the ordinary high water mark or the high tide line, or (2) the discharge is in a special aquatic site, including wetlands. (See general condition 27.) (Sections 10 and 404)

## NATIONWIDE PERMIT CONDITIONS

The following General Conditions must be followed in order for any authorization by a NWP to be valid:

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

15. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

16. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

17. Endangered Species. (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized

under any NWP which “may affect” a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have “no effect” on listed species or critical habitat, or until Section 7 consultation has been completed.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal “takes” of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at <http://www.fws.gov/> and <http://www.noaa.gov/fisheries.html> respectively.

18. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State

Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

19. Designated Critical Resource Waters. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

20. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require pre-construction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. For wetland losses of 1/10 acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWP. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWP.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

21. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

22. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

23. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

24. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

25. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:  
“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate

the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

---

(Transferee)

---

(Date)

26. Compliance Certification. Each permittee who received an NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include:

- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions;
- (b) A statement that any required mitigation was completed in accordance with the permit conditions; and
- (c) The signature of the permittee certifying the completion of the work and mitigation.

27. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) Forty-five calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is “no effect” on listed species or “no potential to cause effects” on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained.

Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);

(4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring pre-construction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination.

(5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.

(e) District Engineer's Decision: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment

(after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

28. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

### **FURTHER INFORMATION**

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project.

### **DEFINITIONS**

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration, establishment (creation), enhancement, or preservation of aquatic resources for the purpose of compensating for unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Discharge: The term "discharge" means any discharge of dredged or fill material.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a

decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

*Ephemeral stream*: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

*Establishment (creation)*: The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

*Historic Property*: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

*Independent utility*: A test to determine what constitutes a single and complete project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

*Intermittent stream*: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

*Loss of waters of the United States*: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of waters of the United States.

*Non-tidal wetland*: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

*Open water*: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of standing or

flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR 328.3(e)).

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through

which surface and subsurface hydrology connects waterbodies with their adjacent uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 20.)

*Shellfish seeding:* The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

*Single and complete project:* The term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete project must have independent utility (see definition). For linear projects, a “single and complete project” is all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

*Stormwater management:* Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

*Stormwater management facilities:* Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

*Stream bed:* The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

*Stream channelization:* The manipulation of a stream’s course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

*Structure:* An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

*Tidal wetland:* A tidal wetland is a wetland (i.e., water of the United States) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR 328.3(b) and 33 CFR 328.3(f), respectively. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line, which is defined at 33 CFR 328.3(d).

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWP, a waterbody is a jurisdictional water of the United States that, during a year with normal patterns of precipitation, has water flowing or standing above ground to the extent that an ordinary high water mark (OHWM) or other indicators of jurisdiction can be determined, as well as any wetland area (see 33 CFR 328.3(b)). If a jurisdictional wetland is adjacent--meaning bordering, contiguous, or neighboring--to a jurisdictional waterbody displaying an OHWM or other indicators of jurisdiction, that waterbody and its adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of "waterbodies" include streams, rivers, lakes, ponds, and wetlands.

## REGIONAL CONDITIONS FOR NATIONWIDE PERMITS IN THE WILMINGTON DISTRICT

### **1.0 Excluded Waters**

The Corps has identified waters that will be excluded from the use of all NWP's during certain timeframes. These waters are:

#### **1.1. Anadromous Fish Spawning Areas**

Waters of the United States identified by either the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina Wildlife Resources Commission (NCWRC) as anadromous fish spawning areas are excluded during the period between February 15 and June 30, without prior written approval from NCDMF or NCWRC and the Corps.

#### **1.2. Trout Waters Moratorium**

Waters of the United States in the twenty-five designated trout counties of North Carolina are excluded during the period between October 15 and April 15 without prior written approval from the NCWRC. (see Section I. b. 7. for a list of the twenty-five trout counties).

#### **1.3. Sturgeon Spawning Areas**

Waters of the United States designated as sturgeon spawning areas are excluded during the period between February 1 and June 30, without prior written approval from the National Marine Fisheries Service (NMFS).

### **2.0 Waters Requiring Additional Notification**

The Corps has identified waters that will be subject to additional notification requirements for activities authorized by all NWP's. These waters are:

#### **2.1. Western NC Counties that Drain to Designated Critical Habitat**

Waters of the U.S. that requires a Pre-Construction Notification pursuant to General Condition 27 (PCN) and located in the sixteen counties listed below, applicants must provide a copy of the PCN to the US Fish and Wildlife Service, 160 Zillicoa Street, Asheville, North Carolina 28805. This PCN must be sent concurrently to the US Fish and Wildlife Service and the Corps Asheville Regulatory Field Office. Please see General Condition 17 for specific notification requirements related to Federally Endangered Species and the following website for information on the location of designated critical habitat.

Counties with tributaries that drain to designated critical habitat that require notification to the Asheville US Fish and Wildlife Service: Avery, Cherokee, Forsyth, Graham, Haywood,

Henderson, Jackson, Macon Mecklenburg, Mitchell, Stokes, Surry, Swain, Transylvania, Union and Yancey.

Website and office addresses for Endangered Species Act Information:

The Wilmington District has developed the following website for applicants which provide guidelines on how to review linked websites and maps in order to fulfill NWP general condition 17 requirements.

<http://www.saw.usace.army.mil/wetlands/ESA>

Applicants who do not have internet access may contact the appropriate US Fish and Wildlife Service offices or the US Army Corps of Engineers office listed below.

US Fish and Wildlife Service  
Asheville Field Office  
160 Zillicoa Street  
Asheville, NC 28801  
Telephone: (828) 258-3939

Asheville US Fish and Wildlife Service Office counties: All counties west of and including Anson, Stanly, Davidson, Forsyth and Stokes Counties

US Fish and Wildlife Service  
Raleigh Field Office  
Post Office Box 33726  
Raleigh, NC 27636-3726  
Telephone: (919) 856-4520

Raleigh US Fish and Wildlife Service Office counties: all counties east of and including Richmond, Montgomery, Randolph, Guilford, and Rockingham Counties.

## **2.2. Special Designation Waters**

Prior to the use of any NWP in any of the following North Carolina identified waters and contiguous wetlands, applicants must comply with Nationwide Permit General Condition 27 (PCN). The North Carolina waters and contiguous wetlands that require additional notification requirements are:

“Outstanding Resource Waters” (ORW) and “High Quality Waters” (HQW) (as designated by the North Carolina Environmental Management Commission), or  
“Inland Primary Nursery Areas” (IPNA) (as designated by the North Carolina Wildlife Resources Commission), or “Contiguous Wetlands” (as defined by the North Carolina Environmental Management Commission), or “Primary Nursery Areas” (PNA) (as designated by the North Carolina Marine Fisheries Commission).

### 2.3. Coastal Area Management Act (CAMA) Areas of Environmental Concern

Non-Federal applicants for any NWP in a designated “Area of Environmental Concern” (AEC) in the twenty (20) counties of Eastern North Carolina covered by the North Carolina Coastal Area Management Act (CAMA), must also obtain the required CAMA permit. Construction activities for non-Federal projects may not commence until a copy of the approved CAMA permit is furnished to the appropriate Wilmington District Regulatory Field Office (Wilmington Field Office – P.O. Box 1890, Wilmington, NC 28402 or Washington Field Office – P.O. Box 1000, Washington, NC 27889).

### 2.4. Barrier Islands

Prior to the use of any NWP on a barrier island of North Carolina, applicants must comply with Nationwide Permit General Condition 27 (PCN).

### 2.5. Mountain or Piedmont Bogs

Prior to the use of any NWP in a “Mountain or Piedmont Bog” of North Carolina, applicants shall comply with Nationwide Permit General Condition 27 (PCN).

Note: The following wetland community types identified in the N.C. Natural Heritage Program document, “Classification of Natural communities of North Carolina (Michael P. Schafale and Alan S. Weakley, 1990), are subject to this regional condition.

Mountain Bogs	Piedmont Bogs
Swamp Forest-Bog Complex	Upland depression Swamp Forest
Swamp Forest-Bog Complex (Spruce Subtype)	
Southern Appalachian Bog (Northern Subtype)	
Southern Appalachian Bog (Southern Subtype)	
Southern Appalachian Fen	

### 2.6. Animal Waste Facilities

Prior to use of any NWP for construction of animal waste facilities in waters of the US, including wetlands, applicants shall comply with Nationwide Permit General Condition 27 (PCN).

### 2.7. Trout Waters

Prior to any discharge of dredge or fill material into streams or waterbodies within the twenty-five (25) designated trout counties of North Carolina, the applicant shall comply with

Nationwide Permit General Condition 27 (PCN). The applicant shall also provide a copy of the notification to the appropriate NCWRC office to facilitate the determination of any potential impacts to designated Trout Waters. Notification to the Corps of Engineers will include a statement with the name of the NCWRC biologist contacted, the date of the notification, the location of work, a delineation of wetlands, a discussion of alternatives to working in the mountain trout waters, why alternatives were not selected, and a plan to provide compensatory mitigation for all unavoidable adverse impacts to mountain trout waters.

#### NCWRC and NC Trout Counties

Mr. Ron Linville			
Western Piedmont Region Coordinator	Alleghany	Caldwell	Watauga
3855 Idlewild Road	Ashe	Mitchell	Wilkes
Kernersville, NC 27284-9180	Avery	Stokes	
Telephone: (336) 769-9453	Burke	Surry	

Mr. Dave McHenry			
Mountain Region Coordinator	Buncombe	Henderson	Polk
20830 Great Smoky Mtn. Expressway	Cherokee	Jackson	Rutherford
Waynesville, NC 28786	Clay	Macon	Swain
Telephone: (828) 452-2546	Graham	Madison	Transylvania
Fax: (828) 452-7772	Haywood	McDowell	Yancey

### 3.0 List of Corps Regional Conditions for All Nationwide Permits

The following conditions apply to all Nationwide Permits in the Wilmington District:

#### 3.1. Limitation of Loss of Perennial Stream Bed

NWPs may not be used for activities that may result in the loss or degradation of greater than 300 total linear feet of perennial streams. The NWPs may not be used for activities that may result in the loss or degradation of greater than 300 total linear feet of ephemeral and intermittent streams that exhibit important aquatic function(s)\* Loss of stream includes the linear feet of stream bed that is filled, excavated, or flooded by the proposed activity. The District Commander can waive the 300 linear foot limit for ephemeral and intermittent streams on a case-by-case basis if he determines that the proposed activity will result in minimal individual and cumulative adverse impacts to the aquatic environment. Waivers for the loss of ephemeral and intermittent streams must be in writing. This waiver only applies to the 300 linear feet threshold for NWPs. Mitigation may still be required for impacts to ephemeral and intermittent streams, on a case-by-case basis, depending on the impacts to the aquatic environment of the proposed project. [\*Note: The Corps uses the Stream Quality Assessment Worksheet, located with Permit Information on the Regulatory Program Web Site, to aid in the determination of aquatic function within the intermittent stream channel.]

### **3.2. Mitigation for Loss of Stream Bed Exceeding 150 Feet.**

For any NWP that results in a loss of more than 150 linear feet of perennial and/or ephemeral/intermittent stream, the applicant shall provide a mitigation proposal to compensate for the loss of aquatic function associated with the proposed activity. For stream losses less than 150 linear feet, that require a PCN, the District Commander may determine, on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effect on the aquatic environment.

### **3.3. Pre-construction Notification for Loss of Streambed Exceeding 150 Feet.**

Prior to use of any NWP for any activity which impacts more than 150 total linear feet of perennial stream or ephemeral/ intermittent stream, the applicant must comply with Nationwide Permit General Condition 27 (PCN). This applies to NWPs that do not have specific notification requirements. If a NWP has specific notification requirements, the requirements of the NWP should be followed.

### **3.4. Restriction on Use of Live Concrete**

For all NWPs which allow the use of concrete as a building material, measures will be taken to prevent live or fresh concrete, including bags of uncured concrete, from coming into contact with waters of the state until the concrete has hardened.

### **3.5. Requirements for Using Riprap for Bank Stabilization**

For all NWPs that allow for the use of riprap material for bank stabilization, the following measures shall be applied:

**3.5.1.** Filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters.

**3.5.2.** The placement of riprap shall be limited to the areas depicted on submitted work plan drawings.

**3.5.3.** The riprap material shall be clean and free from loose dirt or any pollutant except in trace quantities that would not have an adverse environmental effect.

**3.5.4.** It shall be of a size sufficient to prevent its movement from the authorized alignment by natural forces under normal conditions.

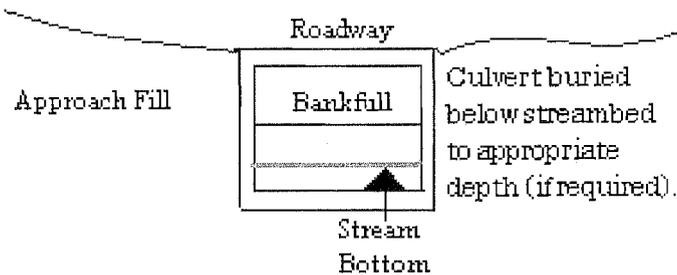
**3.5.5.** The riprap material shall consist of clean rock or masonry material such as, but not limited to, granite, marl, or broken concrete.

**3.5.6.** A waiver from the specifications in this Regional Condition may be requested in writing. The waiver will only be issued if it can be demonstrated that the impacts of complying with this Regional condition would result in greater adverse impacts to the aquatic environment.

### **3.6. Safe Passage Requirements for Culvert Placement**

For all NWP's that involve the construction/installation of culverts, measures will be included in the construction/installation that will promote the safe passage of fish and other aquatic organisms. The dimension, pattern, and profile of the stream above and below a pipe or culvert should not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed opening should be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow should be determined from gage data, if available. In the absence of such data, bankfull flow can be used as a comparable level.

In the twenty (20) counties of North Carolina designated as coastal counties by the Coastal Area Management Act (CAMA): All pipe and culvert bottoms shall be buried at least one foot below normal bed elevation when they are placed within the Public Trust Area of Environmental Concern (AEC) and/or the Estuarine Waters AEC as designated by CAMA, and/or all streams appearing as blue lines on United States Geological Survey (USGS) quad sheets.



In all other counties: Culverts greater than 48 inches in diameter will be buried at least one foot below the bed of the stream. Culverts 48 inches in diameter or less shall be buried or placed on the stream bed as practicable and appropriate to maintain aquatic passage, and every effort shall be made to maintain the existing channel slope. The bottom of the culvert must be placed at a depth below the natural stream bottom to provide for passage during drought or low flow conditions.

Destabilizing the channel and head cutting upstream should be considered in the placement of the culvert.

A waiver from the depth specifications in this condition may be requested in writing. The waiver will be issued if it can be demonstrated that the proposal would result in the least impacts to the aquatic environment.

All counties: Culverts placed in wetlands do not have to be buried.

### **3.7. Notification to NCDENR Shellfish Sanitation Section**

Applicants shall notify the NCDENR Shellfish Sanitation Section prior to dredging in or removing sediment from an area closed to shell fishing where the effluent may be released to an area open for shell fishing or swimming in order to avoid contamination from the disposal area and cause a temporary shellfish closure to be made. Such notification shall also be provided to the appropriate Corps of Engineers Regulatory Field Office. Any disposal of sand to the ocean beach should occur between November 1 and April 30 when recreational usage is low. Only clean sand should be used and no dredged sand from closed shell fishing areas may be used. If beach disposal were to occur at times other than stated above or if sand from a closed shell fishing area is to be used, a swimming advisory shall be posted, and a press release shall be issued.

### **3.8. Preservation of Submerged Aquatic Vegetation**

Adverse impacts to Submerged Aquatic Vegetation (SAV) are not authorized by any NWP within any of the twenty coastal counties defined by North Carolina's Coastal Area Management Act of 1974 (CAMA).

### **4.0 Additional Regional Conditions Applicable to Specific Nationwide Permits**

The following regional conditions are required for NWP #18 – Minor Discharges:

**4.1.** This NWP may not be used in conjunction with NWP #14 to create upland.

## **NC DIVISION OF WATER QUALITY - GENERAL CERTIFICATION CONDITIONS**

For the most recent General Certification conditions, call the NC Division of Water Quality, Wetlands/401 Certification Unit at (919) 733-1786 or access the following website:  
<http://h2o.enr.state.nc.us/newetlands/certs.html>

## **NC DIVISION OF COASTAL MANAGEMENT - STATE CONSISTENCY**

In a letter dated May 7, 2007, the North Carolina Division of Coastal Management found this NWP consistent with the North Carolina Coastal Zone Management Program. Updates on CAMA Consistency for NC can be found on the NC DCM web site at:  
<http://dcm2.enr.state.nc.us/Permits/consist.htm>

## **EASTERN BAND OF THE CHEROKEE INDIANS TRIBAL WATER QUALITY CERTIFICATIONS**

In a letter dated May 8, 2007, US EPA, on behalf of the Eastern Band of Cherokee Indians, provided Tribal General Conditions for Nationwide Permits on Cherokee Indian Reservation. These Tribal General Conditions are located on the Corps website at:  
<http://www.saw.usace.army.mil/WETLANDS/NWP2007/EBCI-certs.html>

### **Citations:**

2007 Nationwide Permits Public Notice for Final Issue Date: March 15, 2007

Correction Notice for Nationwide Permits, Federal Register / Vol. 72, No. 88 / Tuesday, May 8, 2007 / Notices p.26082

2007 SAW Regional Conditions -- Authorized June 1, 2007

This and other information can be found on the Corps web site at:  
<http://www.saw.usace.army.mil/WETLANDS/NWP2007/nationwide-permits.html>



May 11, 2009

Mr. Ronnie Smith  
Wilmington Regulatory Field Office  
U.S. Army Corps of Engineers  
69 Darlington Avenue  
Wilmington, North Carolina 28403

RE: Request for additional information  
Nationwide Permit 18 Pre-Construction Notification  
City of Fayetteville Transfer Station  
Fayetteville, North Carolina  
Action ID# SAW-2008-02816

Dear Mr. Smith;

On behalf of Waste Industries, LLC and Richardson, Smith, Gardner and Associates, Inc., we are providing the following responses to your request for more information regarding the above referenced project. Your requested items are presented below in italics followed by our responses. Additional information referenced in our response is enclosed.

*1) Please explain why the proposed transfer station and the parking area located just east of the proposed transfer station cannot be shifted to the west to minimize the wetland impacts.*

The distance between the driveway entrance and transfer station is set based on a minimum required distance for transfer trailers to align with the pit wall (i.e., the south wall of the transfer station) after they turn off Winslow Street. Moving the station further to the west would reduce this distance and cause practical difficulties in aligning these longer trailers, while still allowing bypass traffic to go around the pit and pick up stored, full trailers. The area to the east of the transfer station is both a maneuvering area for the waste collection vehicles and a temporary storage area for full transfer trailers, while empty trailers are stored to the west. Due to the amount of room needed for maneuvering and storage, the maneuvering area cannot be reduced in size without decreasing safety. The area is sized to accommodate multiple waste collection vehicles at one time as well as several parked transfer trailers (see attached traffic flow diagram).

In addition, the hydrology of the wetland is primarily driven by stormwater discharge from the site. To meet current treatment requirements, the stormwater from the proposed facility would be routed to an adequately sized wet detention pond on the site. This would effectively drain the wetland area and reduce or eliminate wetland functions.

*2) Please explain why the trailer storage area and maneuvering area cannot be smaller or shifted to the north above the proposed roadway and existing transfer station to avoid wetland impacts. It appears that the existing facility can remain in operation if the building and maneuvering area were shifted north of the proposed road.*

The transfer station trailer storage area must be located on the southern half of the property in order to not conflict with waste collection vehicle traffic flow. As seen in the attached traffic flow diagram, the trailer traffic is contained on the south side of the facility until it merges with the outgoing waste collection traffic across the scales. The southern driveway will be used exclusively by transfer trailers to reduce conflicts with waste collection vehicles.

As mentioned above, the maneuvering area is sized to provide adequate room for waste collection vehicles to align in front of the open side of the station, back in, dump their loads, drive out forward, and exit via the scales. The area needed for this activity was determined based on industry experience and Waste Industries criteria for transfer station operation. The attached traffic flow diagram depicts the maneuvering necessary for waste transfer.

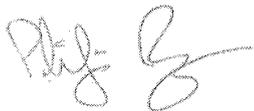
The existing facility cannot remain in operation. It does not have the capacity to handle the projected volume of waste. Upgrading the existing facility to handle the waste volume would take it out of commission for several months, therefore disrupting waste collection services in the City and other areas served by the transfer station.

*3) Please explain why the road cannot loop around the existing transfer station to connect back into the existing road. This would increase the size of the maneuvering area and eliminate the need for the wetland impacts.*

Looping the road around the existing transfer station is not practical for several reasons. First, the maneuvering area needed for the larger waste volume has to be on the open side of the transfer station where waste is dumped and loaded into the transfer trailers. In the case of the existing station, this opening is on the north side, and therefore the maneuvering area cannot be increased if a road is looped around the facility to accommodate the transfer trailer traffic. Secondly, there is not enough room for the road on the east side of the existing station due to property lines and required offsets. Lastly, the existing station is not appropriately sized to handle the waste flow regardless of the road configuration.

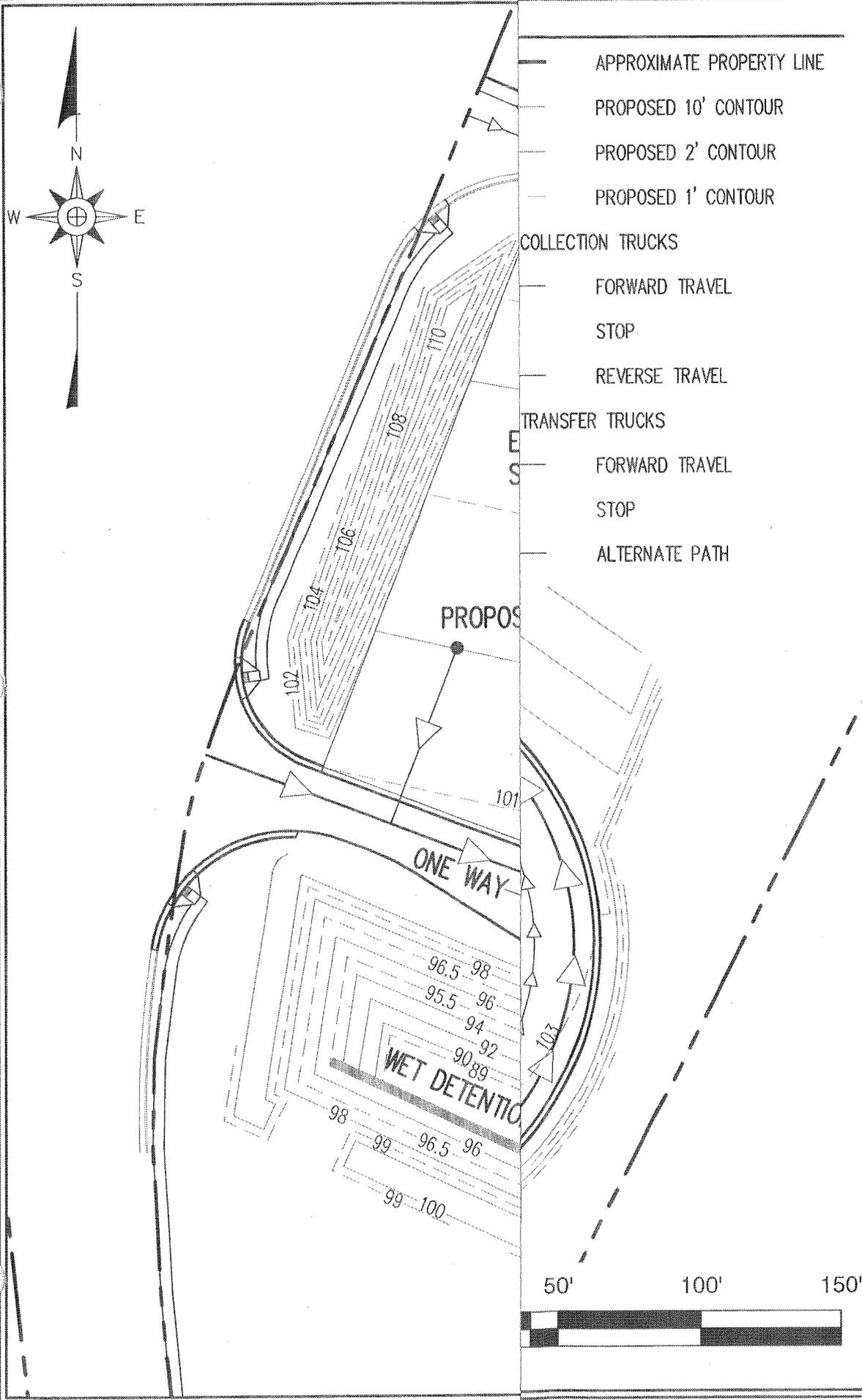
We appreciate your time reviewing these responses and additional information. Please contact me at your earliest convenience at (919) 606-1065 or [phil.may@carolinaeco.com](mailto:phil.may@carolinaeco.com) if you have any further questions or require any additional information.

Sincerely,  
**Carolina Ecosystems, Inc.**



Philip May  
Senior Environmental Scientist

Cc: D. Stephen Grissom, Waste Industries, LLC  
John Gardner, P.E., Richardson Smith Gardner & Associates, Inc.



ph: 919-428-0577  
 fax: 919-428-3899  
 www.rsgengineers.com  
 14 N. Boylan Ave.  
 Raleigh, N.C. 27603

**RICHARDSON SMITH GARDNER & ASSOCIATES**

FIGURE NO.	1
SCALE:	AS NOTED
CHECKED BY:	T.B.M.
PROJECT NO.	FAYETTEVILLE 09-8
FILE NAME	WI-B0576
DRAWN BY:	W.R.B.
DATE:	May, 2009

TITLE:

**CITY OF FAYETTEVILLE  
 TRANSFER STATION  
 TRAFFIC CIRCULATION DIAGRAM**

April 17, 2009

Mr. Ronnie Smith  
Wilmington Regulatory Field Office  
U.S. Army Corps of Engineers  
69 Darlington Avenue  
Wilmington, North Carolina 28403

RE: Nationwide Permit 18 Pre-Construction Notification  
City of Fayetteville Transfer Station  
Fayetteville, North Carolina

Dear Mr. Smith;

Waste Industries, LLC has entered into a long-term agreement with the City of Fayetteville to operate their solid waste transfer station located on Winslow Street in Fayetteville, NC (Figure 1). As part of this agreement, the current facility will be upgraded to handle a higher daily capacity of waste collection volume within the service area of the transfer station. In support of this activity, Carolina Ecosystems, Inc. and Richardson Smith Gardner and Associates, Inc. (RSG) have prepared this Nationwide Permit 18 Pre-Construction Notification (PCN) for anticipated impacts to wetlands under the jurisdiction of Section 404 and 401 of the Clean Water Act. Included in this submittal are the PCN form, site and impact maps, site photographs, wetland delineation information, and engineering plans. Additional information supplementing the new PCN form is included in this cover letter.

**Item B3d: Project Purpose**

The purpose of the proposed project is to upgrade the existing facility from its current capacity (350 to 400 tons per day) to a facility that could handle the projected average 500 tons per day to a maximum of 600 tons per day. This increase in solid waste handling capacity requires both a new building and a realignment of the traffic flow through the site to allow for one-way movement of transfer trailers and avoid conflicts with waste collection vehicles.

**Item B3e: Project Description**

The project will involve construction of a new transfer station south of the existing station. The existing station must remain in operation throughout the construction of the new facility in order to maintain normal solid waste collection in the service area of the transfer station. An existing driveway easement will be used to construct a second entrance to the facility and allow for one-way flow of transfer trailer traffic through the new transfer station. Once the new station is in

operation, the old station structure will be removed and that area will be smooth graded and vegetated.

Standard construction equipment will be used to place fill in the wetland area and grade the site in preparation for the building and road construction. This would potentially include pans, graders, and excavators to move the fill material as well as backhoes and other standard construction equipment to install stormwater structures and other associated components of the project per the attached plans.

**Item D1a: Avoidance and Minimization**

The proposed wetland impact cannot be avoided for several reasons. The one-way driveway is required to allow traffic flow that can handle the 500+ tpd predicted waste stream. The entire drainage will be impacted due to its small size and the need for additional maneuvering area for the transfer trailers at the station. Since the drainage currently collects stormwater on the site and discharges it directly to the Blounts Creek bottomland floodplain wetland system, the portion of the wetland above the crossing would be drained through the rerouting of stormwater to the proposed wet detention basin. The project cannot be shifted north to avoid the wetland as the existing transfer station must continue in operation until the new one is constructed. All of the forested floodplain wetland has been avoided through the use of 2:1 side slopes (3:1 for basin embankment) and a retaining wall.

The preceding information, along with the enclosed PCN form and associated materials, is submitted for your review for this project. In conjunction with this application we are requesting a jurisdictional determination of the wetlands described in the delineation information (Attachment 4). One copy of this application has been sent to the NCDWQ for stormwater review only, as written concurrence of the impacts is not required. We appreciate your time in reviewing the documentation of this project. Please contact me at your earliest convenience at (919) 606-1065 or [phil.may@carolinaeco.com](mailto:phil.may@carolinaeco.com) if you have any questions or require any additional information.

Sincerely,  
**Carolina Ecosystems, Inc.**



Philip May  
Senior Environmental Scientist

Cc: Cyndi Karoly, NCDWQ 401 Unit (1 copy)  
Jerry Dietzen, City of Fayetteville  
D. Stephen Grissom, Waste Industries, LLC  
John Gardner, P.E., Richardson Smith Gardner & Associates, Inc.

**City of Fayetteville Transfer Station  
Nationwide Permit 18 Pre-Construction Notification**

**ATTACHMENT LIST**

**Attachment**

1	PCN Form
2	Figures
3	Site Photographs
4	Wetland Delineation Information
5	Erosion and Sediment Control/Stormwater Plan
6	Engineering Plans

**Attachment 2:**

**Figures**

1	Vicinity Map
2	Site Overview
3	USGS Map
4	Soils Map
5	Proposed Conditions
6	Site Impacts

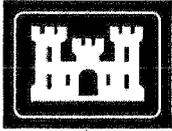
**Attachment 6**

**Engineering Plans**

--	Title – Cover Sheet
S1	Existing Conditions – Demolition Plan
S2	Site Development Plan
S3	Landscape Plan
D1	Roadway Details
D2	Standard Details – Traffic Circulation
D3	Gabion Wall Details
EC1	Erosion and Sedimentation Control Details (Sheet 1 of 2)
EC2	Erosion and Sedimentation Control Details (Sheet 2 of 2)

**ATTACHMENT 1**

**Pre-Construction Notification Form**



Office Use Only:  
 Corps action ID no. \_\_\_\_\_  
 DWQ project no. \_\_\_\_\_  
 Form Version 1.4 January 2009

## Pre-Construction Notification (PCN) Form

### A. Applicant Information

#### 1. Processing

1a. Type(s) of approval sought from the Corps:  Section 404 Permit  Section 10 Permit

1b. Specify Nationwide Permit (NWP) number: 18 or General Permit (GP) number:

1c. Has the NWP or GP number been verified by the Corps?  Yes  No

1d. Type(s) of approval sought from the DWQ (check all that apply):

- 401 Water Quality Certification – Regular  Non-404 Jurisdictional General Permit  
 401 Water Quality Certification – Express  Riparian Buffer Authorization

1e. Is this notification solely for the record because written approval is not required? For the record only for DWQ 401 Certification:  Yes  No For the record only for Corps Permit:  Yes  No

1f. Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts? If so, attach the acceptance letter from mitigation bank or in-lieu fee program.  Yes  No

1g. Is the project located in any of NC's twenty coastal counties. If yes, answer 1h below.  Yes  No

1h. Is the project located within a NC DCM Area of Environmental Concern (AEC)?  Yes  No

#### 2. Project Information

2a. Name of project: City of Fayetteville Transfer Station

2b. County: Cumberland County NC

2c. Nearest municipality / town: Fayetteville NC

2d. Subdivision name: Not applicable

2e. NCDOT only, T.I.P. or state project no: Not applicable

#### 3. Owner Information

3a. Name(s) on Recorded Deed: City of Fayetteville

3b. Deed Book and Page No. Book 03702 / Page 00894

3c. Responsible Party (for LLC if applicable): Jerry Dietzen, Solid Waste Director

3d. Street address: 433 Hay Street

3e. City, state, zip: Fayetteville, NC 28301-5537

3f. Telephone no.: (910) 433-1984

3g. Fax no.: (910) 433-1516

3h. Email address: gdietzen@ci.fay.nc.us

<b>4. Applicant Information (if different from owner)</b>	
4a. Applicant is:	<input type="checkbox"/> Agent <input checked="" type="checkbox"/> Other, specify: Site Operator
4b. Name:	D. Stephen Grissom
4c. Business name (if applicable):	Waste Industries, LLC
4d. Street address:	3301 Benson Drive, Suite 601
4e. City, state, zip:	Raleigh, NC 27609
4f. Telephone no.:	(919) 325-3000
4g. Fax no.:	(919) 325-4040
4h. Email address:	steve.grissom@wasteindustries.com
<b>5. Agent/Consultant Information (if applicable)</b>	
5a. Name:	Phil May
5b. Business name (if applicable):	Carolina Ecosystems, Inc.
5c. Street address:	8208 Brian Court
5d. City, state, zip:	Garner, NC 27529
5e. Telephone no.:	(919) 606-1065
5f. Fax no.:	(919) 341-4474
5g. Email address:	phil.may@carolinaeco.com

<b>B. Project Information and Prior Project History</b>	
<b>1. Property Identification</b>	
1a. Property identification no. (tax PIN or parcel ID):	0437-31-2400
1b. Site coordinates (in decimal degrees):	Latitude: 35.0452 Longitude: -78.8893
1c. Property size:	9.38 acres
<b>2. Surface Waters</b>	
2a. Name of nearest body of water to proposed project:	Blounts Creek (DWQ Index No: 18-27-5)
2b. Water Quality Classification of nearest receiving water:	Class C
2c. River basin:	Cape Fear (HUC 03030004 / Subbasin 03-06-15)
<b>3. Project Description</b>	
3a. Describe the existing conditions on the site and the general land use in the vicinity of the project at the time of this application: The site is currently an existing solid waste transfer station for the City of Fayetteville. The surrounding land use is classified as high intensity developed (industrial and commercial) to the north, east, and west of the site. Along the historically disturbed floodplain of Blounts Creek the land use is a mix of southern yellow pine, bottomland forest/hardwood swamps, and oak-gum-cypress forest.	
3b. List the total estimated acreage of all existing wetlands on the property: 0	
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 0	
3d. Explain the purpose of the proposed project: See cover letter.	
3e. Describe the overall project in detail, including the type of equipment to be used: See cover letter.	
<b>4. Jurisdictional Determinations</b>	
4a. Have jurisdictional wetland or stream determinations by the Corps or State been requested or obtained for this property / project (including all prior phases) in the past?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown Comments: JD requested with this submittal
4b. If the Corps made the jurisdictional determination, what type of determination was made?	<input type="checkbox"/> Preliminary <input type="checkbox"/> Final
4c. If yes, who delineated the jurisdictional areas? Name (if known):	Agency/Consultant Company: Other:
4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation.	
<b>5. Project History</b>	
5a. Have permits or certifications been requested or obtained for this project (including all prior phases) in the past?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
5b. If yes, explain in detail according to "help file" instructions.	
<b>6. Future Project Plans</b>	
6a. Is this a phased project?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6b. If yes, explain.	

**C. Proposed Impacts Inventory**

**1. Impacts Summary**

1a. Which sections were completed below for your project (check all that apply):

- Wetlands     Streams – tributaries     Buffers     Open Waters     Pond Construction

**2. Wetland Impacts**

If there are wetland impacts proposed on the site, then complete this question for each wetland area impacted.

2a. Wetland impact number Permanent (P) or Temporary (T)	2b. Type of impact	2c. Type of wetland	2d. Forested	2e. Type of jurisdiction Corps (404,10) or DWQ (401, other)	2f. Area of impact (acres)
W1    P	Fill	Headwater Wetland	No	Corps	0.06
W2    -	Choose one	Choose one	Yes/No	-	
W3    -	Choose one	Choose one	Yes/No	-	
W4    -	Choose one	Choose one	Yes/No	-	
W5    -	Choose one	Choose one	Yes/No	-	
W6    -	Choose one	Choose one	Yes/No	-	
<b>2g. Total Wetland Impacts:</b>					0.06

2h. Comments:

The wetland is a disturbed drainage collecting stormwater off the current transfer station site. It is comprised of primarily herbaceous emergent vegetation due to disturbance, predominantly *Typha latifolia* (see attached photos).

**3. Stream Impacts**

If there are perennial or intermittent stream impacts (including temporary impacts) proposed on the site, then complete this question for all stream sites impacted.

3a. Stream impact number Permanent (P) or Temporary (T)	3b. Type of impact	3c. Stream name	3d. Perennial (PER) or intermittent (INT)?	3e. Type of jurisdiction	3f. Average stream width (feet)	3g. Impact length (linear feet)
S1    -	Choose one		-	-		
S2    -	Choose one		-	-		
S3    -	Choose one		-	-		
S4    -	Choose one		-	-		
S5    -	Choose one		-	-		
S6    -	Choose one		-	-		
<b>3h. Total stream and tributary impacts</b>						

3i. Comments:

**4. Open Water Impacts**

If there are proposed impacts to lakes, ponds, estuaries, tributaries, sounds, the Atlantic Ocean, or any other open water of the U.S. then individually list all open water impacts below.

4a. Open water impact number Permanent (P) or Temporary (T)	4b. Name of waterbody (if applicable)	4c. Type of impact	4d. Waterbody type	4e. Area of impact (acres)
O1 -		Choose one	Choose	
O2 -		Choose one	Choose	
O3 -		Choose one	Choose	
O4 -		Choose one	Choose	

**4f. Total open water impacts**

4g. Comments:

**5. Pond or Lake Construction**

If pond or lake construction proposed, then complete the chart below.

5a. Pond ID number	5b. Proposed use or purpose of pond	5c. Wetland Impacts (acres)			5d. Stream Impacts (feet)			5e. Upland (acres)
		Flooded	Filled	Excavated	Flooded	Filled	Excavated	
P1	Choose one							
P2	Choose one							
<b>5f. Total:</b>								

5g. Comments:

5h. Is a dam high hazard permit required?  Yes  No If yes, permit ID no:

5i. Expected pond surface area (acres):

5j. Size of pond watershed (acres):

5k. Method of construction:

**6. Buffer Impacts (for DWQ)**

If project will impact a protected riparian buffer, then complete the chart below. If yes, then individually list all buffer impacts below. If any impacts require mitigation, then you **MUST** fill out Section D of this form.

6a. Project is in which protected basin?		<input type="checkbox"/> Neuse <input type="checkbox"/> Tar-Pamlico <input type="checkbox"/> Catawba <input type="checkbox"/> Randleman <input type="checkbox"/> Other:					
6b. Buffer Impact number – Permanent (P) or Temporary (T)	6c. Reason for impact	6d. Stream name			6e. Buffer mitigation required?	6f. Zone 1 impact (square feet)	6g. Zone 2 impact (square feet)
B1 -					Yes/No		
B2 -					Yes/No		
B3 -					Yes/No		
B4 -					Yes/No		
B5 -					Yes/No		
B6 -					Yes/No		

**6h. Total Buffer Impacts:**

6i. Comments:

**D. Impact Justification and Mitigation**

**1. Avoidance and Minimization**

1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing project.  
See cover letter

1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques. Construction limits will be identified in the field and where adjacent to wetlands will be demarcated with orange tree protection fencing. Silt fence will be used to prevent sediment from entering the undisturbed wetlands during construction. The approved permit application and conditions will be provided to the construction manager and all subcontractors.

**2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State**

2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?  Yes  No

2b. If yes, mitigation is required by (check all that apply):  DWQ  Corps

2c. If yes, which mitigation option will be used for this project?  Mitigation bank  
 Payment to in-lieu fee program  
 Permittee Responsible Mitigation

**3. Complete if Using a Mitigation Bank**

3a. Name of Mitigation Bank:

3b. Credits Purchased (attach receipt and letter)	Type: Choose one	Quantity:
	Type: Choose one	Quantity:
	Type: Choose one	Quantity:

3c. Comments:

**4. Complete if Making a Payment to In-lieu Fee Program**

4a. Approval letter from in-lieu fee program is attached.  Yes

4b. Stream mitigation requested: linear feet

4c. If using stream mitigation, stream temperature: Choose one

4d. Buffer mitigation requested (DWQ only): square feet

4e. Riparian wetland mitigation requested: acres

4f. Non-riparian wetland mitigation requested: acres

4g. Coastal (tidal) wetland mitigation requested: acres

4h. Comments:

**5. Complete if Using a Permittee Responsible Mitigation Plan**

5a. If using a permittee responsible mitigation plan, provide a description of the proposed mitigation plan.

**6. Buffer Mitigation (State Regulated Riparian Buffer Rules) – required by DWQ**

6a. Will the project result in an impact within a protected riparian buffer that requires buffer mitigation?

Yes       No

6b. If yes, then identify the square feet of impact to each zone of the riparian buffer that requires mitigation. Calculate the amount of mitigation required.

Zone	6c. Reason for impact	6d. Total impact (square feet)	Multiplier	6e. Required mitigation (square feet)
Zone 1			3 (2 for Catawba)	
Zone 2			1.5	
<b>6f. Total buffer mitigation required:</b>				

6g. If buffer mitigation is required, discuss what type of mitigation is proposed (e.g., payment to private mitigation bank, permittee responsible riparian buffer restoration, payment into an approved in-lieu fee fund).

6h. Comments:

<b>E. Stormwater Management and Diffuse Flow Plan (required by DWQ)</b>	
<b>1. Diffuse Flow Plan</b>	
1a. Does the project include or is it adjacent to protected riparian buffers identified within one of the NC Riparian Buffer Protection Rules?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1b. If yes, then is a diffuse flow plan included? If no, explain why.	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>2. Stormwater Management Plan</b>	
2a. What is the overall percent imperviousness of this project?	26.1 %
2b. Does this project require a Stormwater Management Plan?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2c. If this project DOES NOT require a Stormwater Management Plan, explain why:	
2d. If this project DOES require a Stormwater Management Plan, then provide a brief, narrative description of the plan: The site stormwater will be routed to a wet detention pond on the southwest portion of the property. The pond has been designed to meet all City of Fayetteville and NC DWQ design standards. The BMP meets the required removal capacities, and will be maintained on site and inspected by the City. The discharge from the pond will outlet at the edge of the floodplain/wetland area through a low velocity wier outlet to prevent degradation of the adjacent floodplain wetlands.	
2e. Who will be responsible for the review of the Stormwater Management Plan?	NCDWQ 401 Unit
<b>3. Certified Local Government Stormwater Review</b>	
3a. In which local government's jurisdiction is this project?	
3b. Which of the following locally-implemented stormwater management programs apply (check all that apply):	<input type="checkbox"/> Phase II <input type="checkbox"/> NSW <input type="checkbox"/> USMP <input type="checkbox"/> Water Supply Watershed <input type="checkbox"/> Other:
3c. Has the approved Stormwater Management Plan with proof of approval been attached?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>4. DWQ Stormwater Program Review</b>	
4a. Which of the following state-implemented stormwater management programs apply (check all that apply):	<input type="checkbox"/> Coastal counties <input type="checkbox"/> HQW <input type="checkbox"/> ORW <input type="checkbox"/> Session Law 2006-246 <input type="checkbox"/> Other:
4b. Has the approved Stormwater Management Plan with proof of approval been attached?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>5. DWQ 401 Unit Stormwater Review</b>	
5a. Does the Stormwater Management Plan meet the appropriate requirements?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5b. Have all of the 401 Unit submittal requirements been met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

<b>F. Supplementary Information</b>	
<b>1. Environmental Documentation (DWQ Requirement)</b>	
1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1b. If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
1c. If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.) Comments:	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>2. Violations (DWQ Requirement)</b>	
2a. Is the site in violation of DWQ Wetland Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), DWQ Surface Water or Wetland Standards, or Riparian Buffer Rules (15A NCAC 2B .0200)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2b. Is this an after-the-fact permit application?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2c. If you answered "yes" to one or both of the above questions, provide an explanation of the violation(s):	
<b>3. Cumulative Impacts (DWQ Requirement)</b>	
3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3b. If you answered "yes" to the above, submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent DWQ policy. If you answered "no," provide a short narrative description. The proposed project is an upgrade of an existing solid waste transfer station facility in a heavily urbanized setting. No additional development in the area is anticipated to result from the project, as the vicinity is almost fully built out. In addition, the presence of a solid waste transfer station is not likely to spur secondary development in the area.	
<b>4. Sewage Disposal (DWQ Requirement)</b>	
4a. Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility. The current facility has a City of Fayetteville sewer connection on the site, and this connection will be utilized for the new transfer station. Adequate capacity is available for this development at the City's treatment facility.	

<b>5. Endangered Species and Designated Critical Habitat (Corps Requirement)</b>		
5a. Will this project occur in or near an area with federally protected species or habitat?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5b. Have you checked with the USFWS concerning Endangered Species Act impacts?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5c. If yes, indicate the USFWS Field Office you have contacted.	-	
5d. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? USFWS Cumberland Co Species List ( <a href="http://www.fws.gov/nc-es/es/countyfr.html">http://www.fws.gov/nc-es/es/countyfr.html</a> ); NC Natural Heritage Program Virtual Workroom ( <a href="http://nhpweb.enr.state.nc.us/nhis/public/gmap75_main.phtml">http://nhpweb.enr.state.nc.us/nhis/public/gmap75_main.phtml</a> ). Supplemented by site review for potential habitat during the wetland delineation for the project.		
<b>6. Essential Fish Habitat (Corps Requirement)</b>		
6a. Will this project occur in or near an area designated as essential fish habitat?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
6b. What data sources did you use to determine whether your site would impact Essential Fish Habitat? EFH Interactive mapper ( <a href="http://sharpfin.nmfs.noaa.gov/website/EFH_Mapper/map.aspx">http://sharpfin.nmfs.noaa.gov/website/EFH_Mapper/map.aspx</a> )		
<b>7. Historic or Prehistoric Cultural Resources (Corps Requirement)</b>		
7a. Will this project occur in or near an area that the state, federal or tribal governments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
7b. What data sources did you use to determine whether your site would impact historic or archeological resources? NCSHPO National Register of Historic Places List ( <a href="http://www.hpo.ncdcr.gov/nrist.htm">http://www.hpo.ncdcr.gov/nrist.htm</a> ); Archiplanet ( <a href="http://www.archiplanet.org/wiki/Main_Page">http://www.archiplanet.org/wiki/Main_Page</a> ).		
<b>8. Flood Zone Designation (Corps Requirement)</b>		
8a. Will this project occur in a FEMA-designated 100-year floodplain?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
8b. If yes, explain how project meets FEMA requirements: A Floodplain Development Permit Application will be submitted to the City of Fayetteville to document that the proposed structure is outside of the regulatory floodway.		
8c. What source(s) did you use to make the floodplain determination? NC Floodplain Mapping Program GIS data files.		
Carl D. Massey Jr. Applicant/Agent's Printed Name	 Applicant/Agent's Signature (Agent's signature is valid only if an authorization letter from the applicant is provided.)	4-23-09 Date

AGENT AUTHORIZATION FORM

PROPERTY LEGAL DESCRIPTION:

LOT NO. 2-11,18-47 PLAN NO. BK9 PG20 PARCEL ID: 0437-31-2400

STREET ADDRESS: 583 Winslow Street, Fayetteville, NC 28301

Please print:

Property Owner: City of Fayetteville (Jerry Dietzen, Solid Waste Director)

Property Owner: \_\_\_\_\_

The undersigned, registered property owners of the above noted property, do hereby authorize

Carl Massey, of Waste Industries, LLC  
(Contractor / Agent) (Name of consulting firm)

to act on my behalf and take all actions necessary for the processing, issuance and acceptance of this permit or certification and any and all standard and special conditions attached.

Property Owner's Address (if different than property above):

433 Hay Street, Fayetteville, NC 28301-5537

Telephone: (910) 433-1984

We hereby certify the above information submitted in this application is true and accurate to the best of our knowledge.

  
Authorized Signature

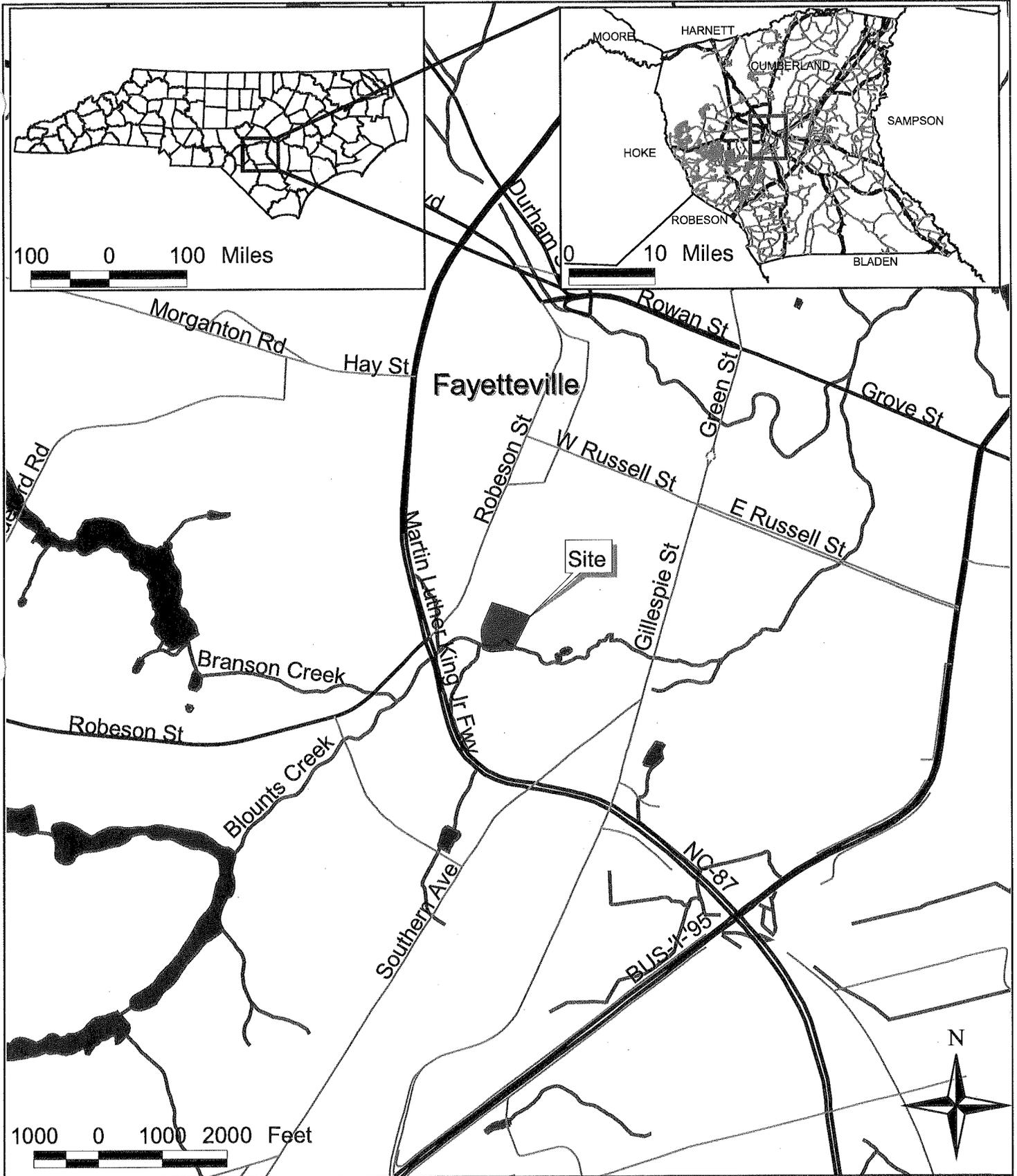
Date: 4/27/09

\_\_\_\_\_  
Authorized Signature

Date: \_\_\_\_\_

**ATTACHMENT 2**

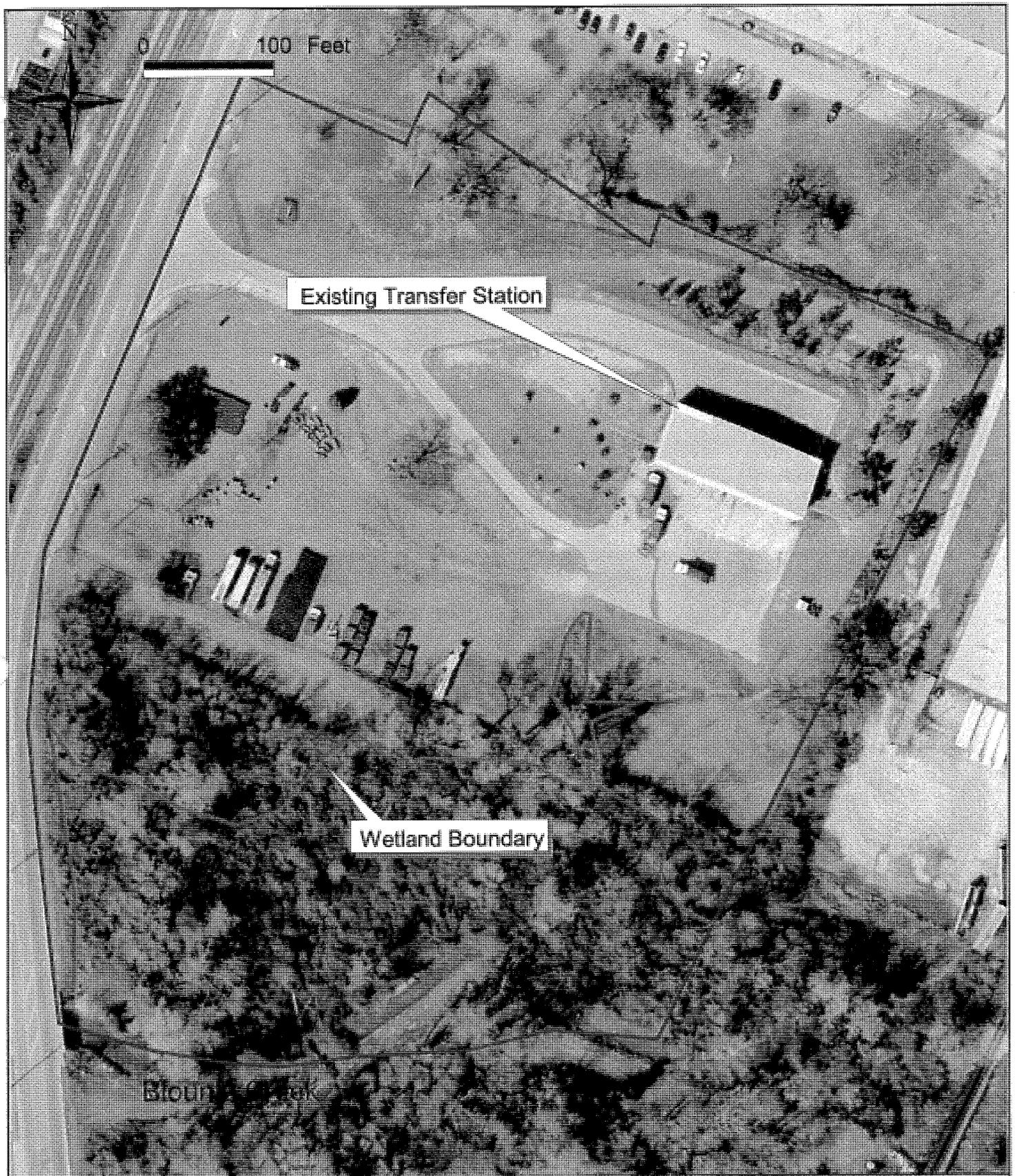
**Figures**



CAROLINA  
 ECOSYSTEMS, INC.  
 Garner, NC 27529  
 O: (919) 606-1065  
 F: (919) 341-4474  
 www.carolinaeco.com

Data Sources:  
 - NCDOT County Boundaries  
 - NCDOT Primary Roads  
 - NCDOT Secondary Roads  
 Date: March 2, 2009

Figure 1: Vicinity Map  
 City of Fayetteville Transfer Station  
 Cumberland County, NC  
 Richardson Smith Gardner & Assoc.

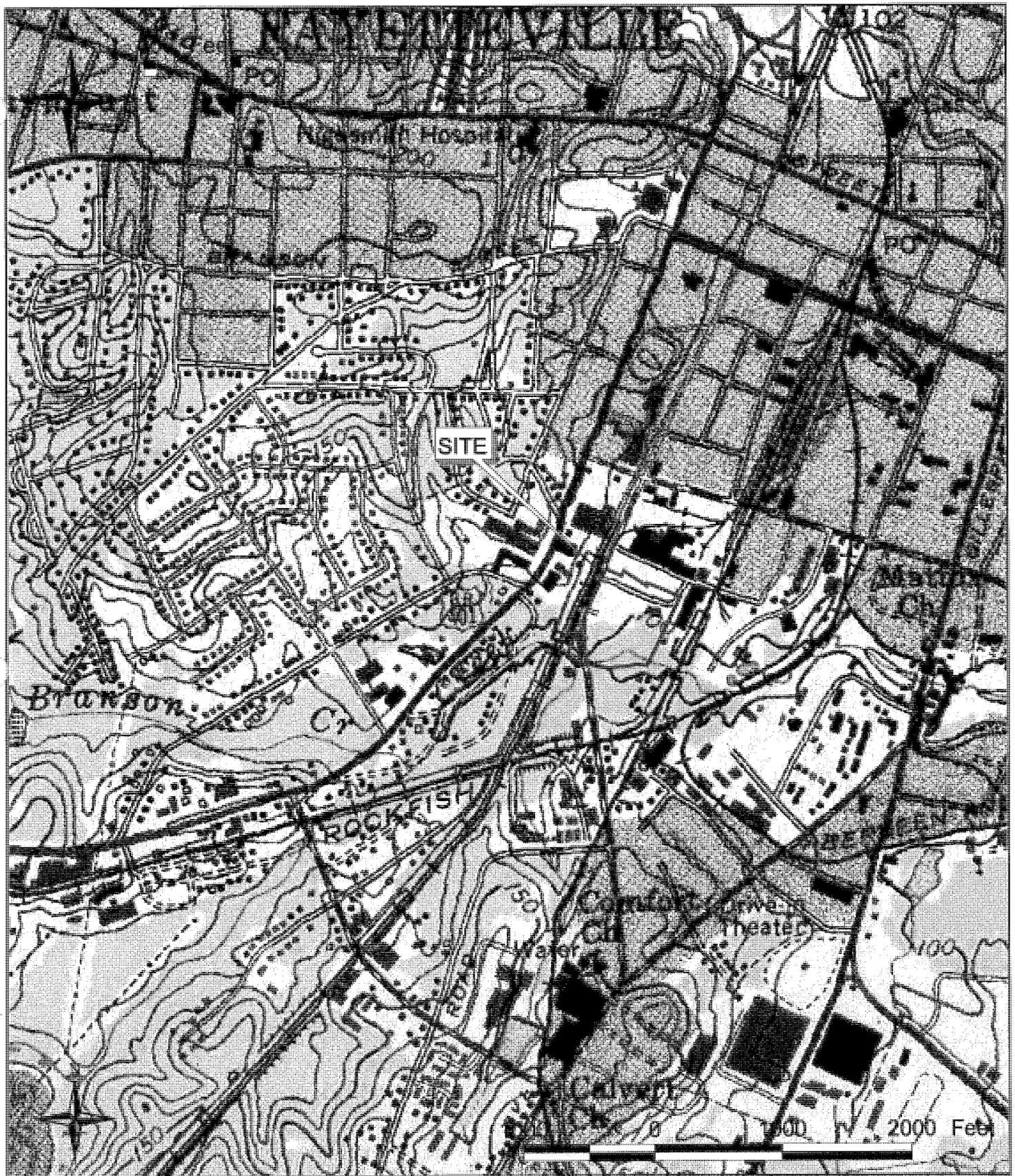


CAROLINA  
ECOSYSTEMS, INC.  
8208 Brian Court  
Gamer, NC 27529  
O: (919) 606-1065  
F: (919) 341-4474  
www.carolinaeco.com

Data Sources:  
- NC One Map Aerial Photography  
- Wetland survey Dec 2008

Date: March 10, 2009

Figure 2: Site Overview  
City of Fayetteville Transfer Station  
Cumberland County, NC  
Richardson, Smith, Gardner & Assoc.

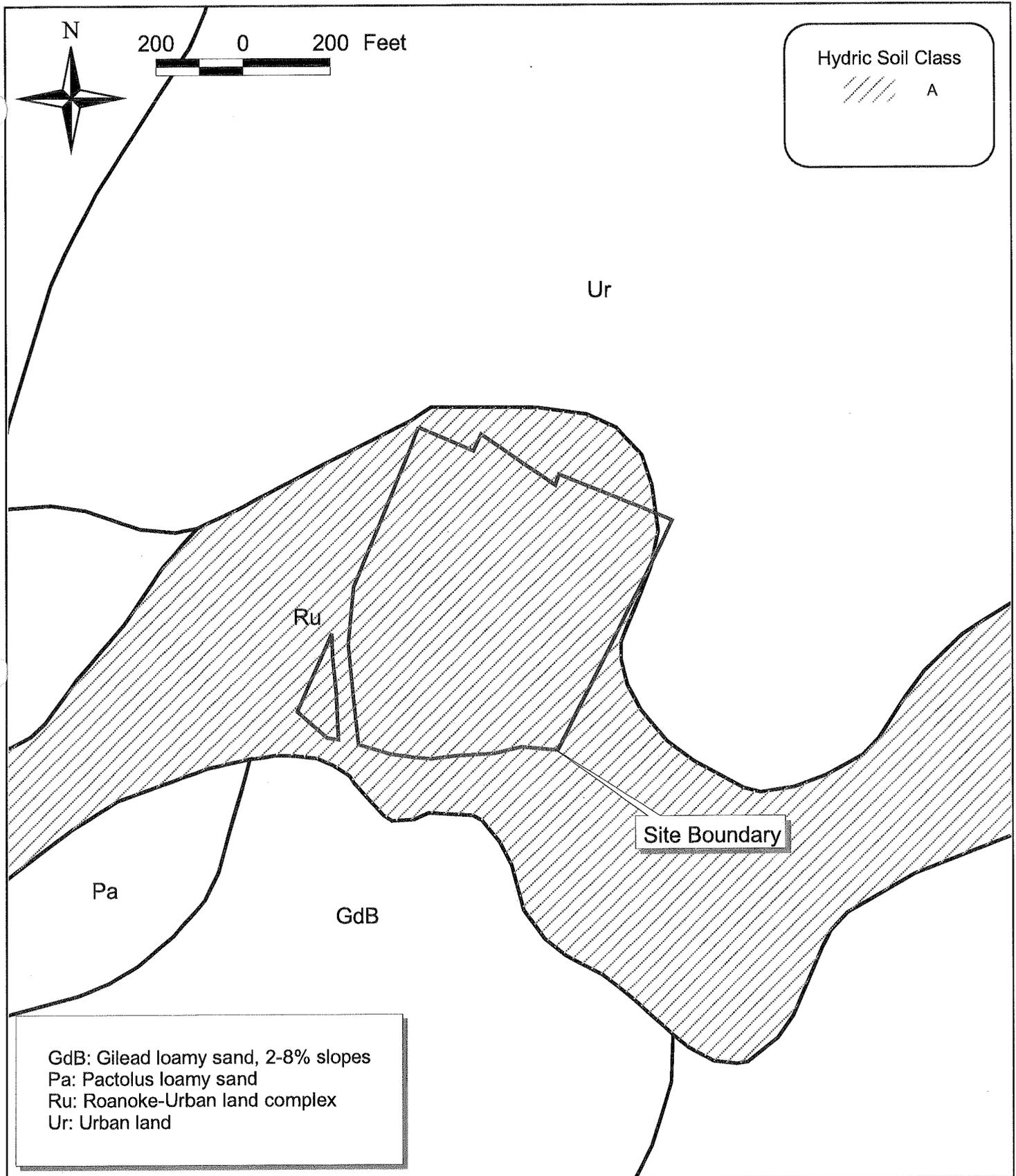


CAROLINA  
 ECOSYSTEMS, INC.  
 8208 Brian Court  
 Garner, NC 27529  
 O: (919) 606-1065  
 F: (919) 341-4474  
 www.carolinaco.com

**Data Sources:**  
 - USGS 1:24,000 Topographic Map  
 - Fayetteville NC Quad  
 - NCDOT USGS Images

**Date:** March 10, 2009

**Figure 3: USGS Map**  
 City of Fayetteville Transfer Station  
 Cumberland County, NC  
 Richardson, Smith, Gardner & Assoc.



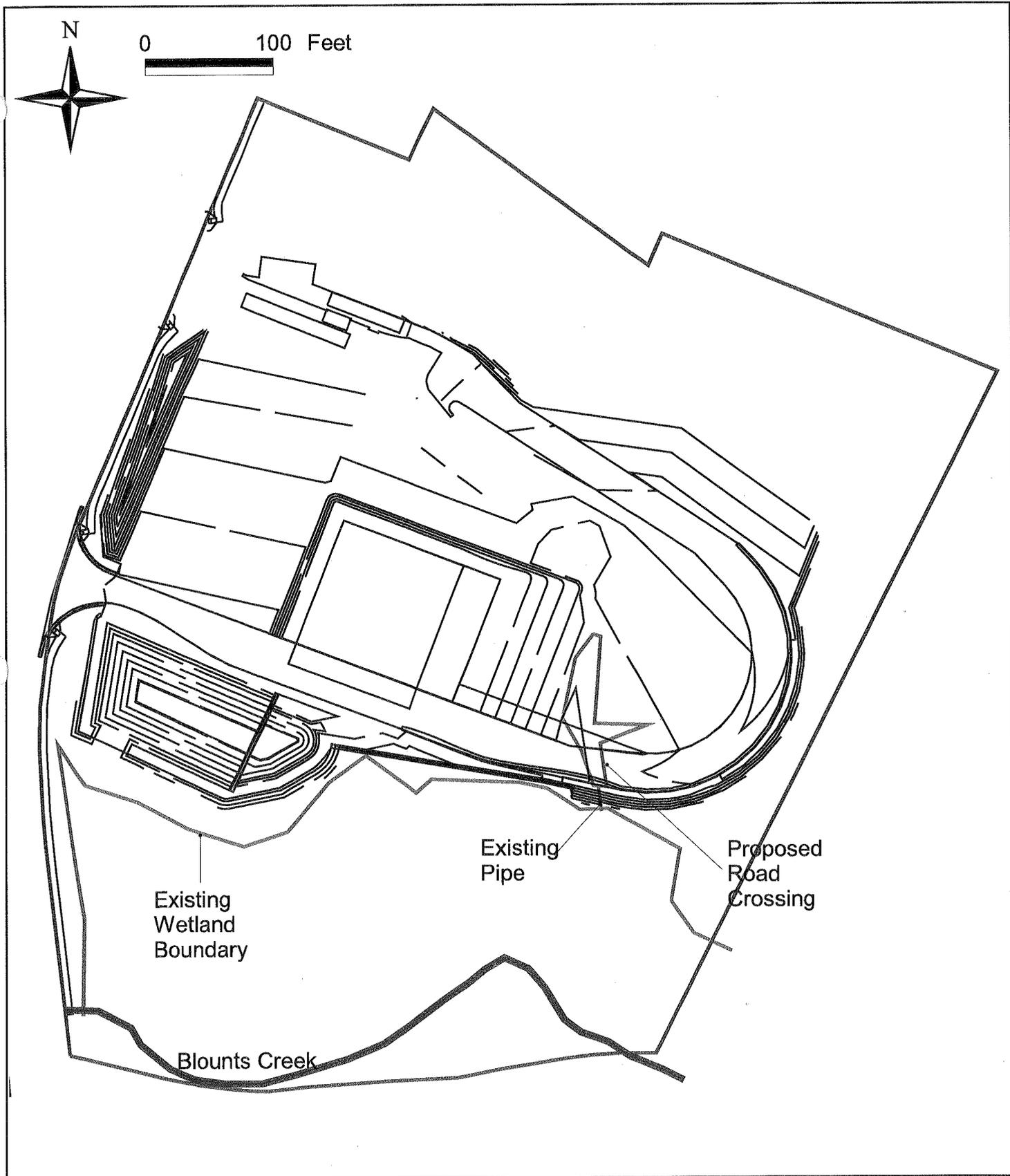
GdB: Gilead loamy sand, 2-8% slopes  
 Pa: Pactolus loamy sand  
 Ru: Roanoke-Urban land complex  
 Ur: Urban land

**CAROLINA ECOSYSTEMS, INC.**  
 8208 Brian Court  
 Garner, NC 27529  
 O: (919) 606-1065  
 F: (919) 341-4474  
 www.carolinaeco.com

**Data Sources:**  
 - NRCS Soil Survey 1984  
 - Cumberland & Hoke Counties, NC

**Date: March 10, 2009**

**Figure 4: Soils Map**  
 City of Fayetteville Transfer Station  
 Cumberland County, NC  
 Richardson, Smith, Gardner & Assoc.

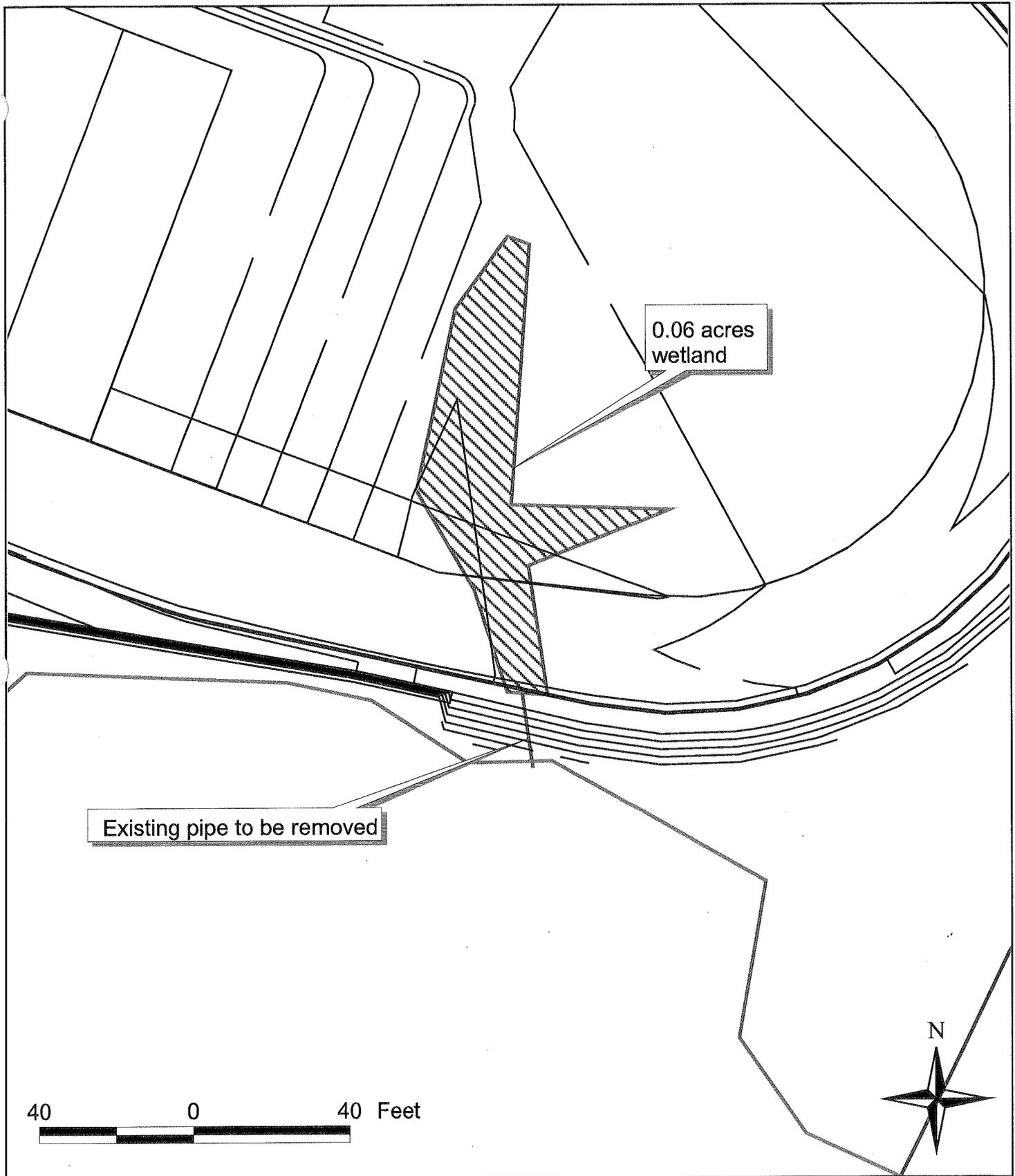


**CAROLINA ECOSYSTEMS, INC.**  
 8208 Brian Court  
 Garner, NC 27529  
 O: (919) 606-1065  
 F: (919) 341-4474  
 www.carolinaeco.com

**Data Sources:**  
 - RSG Design Plans March 2009  
 - Wetland survey Dec 2008

**Date:** March 10, 2009

**Figure 5: Proposed Conditions**  
 City of Fayetteville Transfer Station  
 Cumberland County, NC  
 Richardson Smith Gardner & Assoc.



**CAROLINA ECOSYSTEMS, INC.**  
 8208 Brian Court  
 Garner, NC 27529  
 O: (919) 606-1065  
 F: (919) 341-4474  
 www.carolinaeco.com

**Data Sources:**  
 - RSG Design Plans March 2009  
 - Wetland survey Dec 2008

**Date:** March 10, 2009

**Figure 6: Site Impacts**  
 City of Fayetteville Transfer Station  
 Cumberland County, NC  
 Richardson, Smith, Gardner & Assoc.

**ATTACHMENT 3**

**Site Photographs**



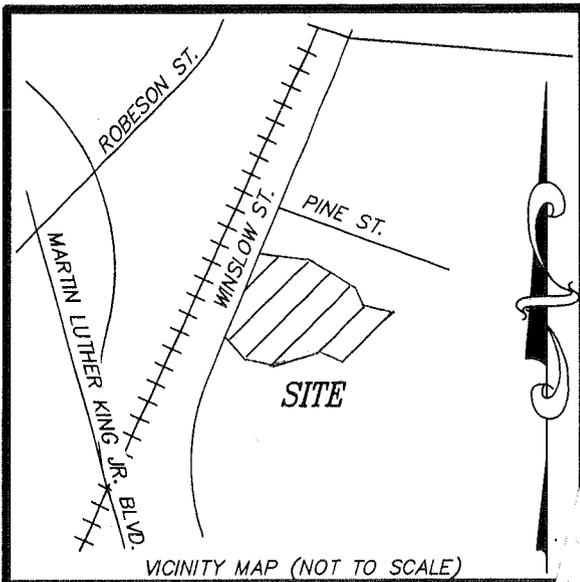
**Photo 1:** Impact area looking toward floodplain. Note no forested wetland in impact area.



**Photo 2:** Closer view of disturbed wetland area to be impacted.

**ATTACHMENT 4**

**Wetland Delineation Information**



I, DWAYNE R. KROEZE, HEREBY CERTIFY THAT ALL LOCATIONS ARE TRUE AND CORRECT TO THE BEST OF KNOWLEDGE AND BELIEF.

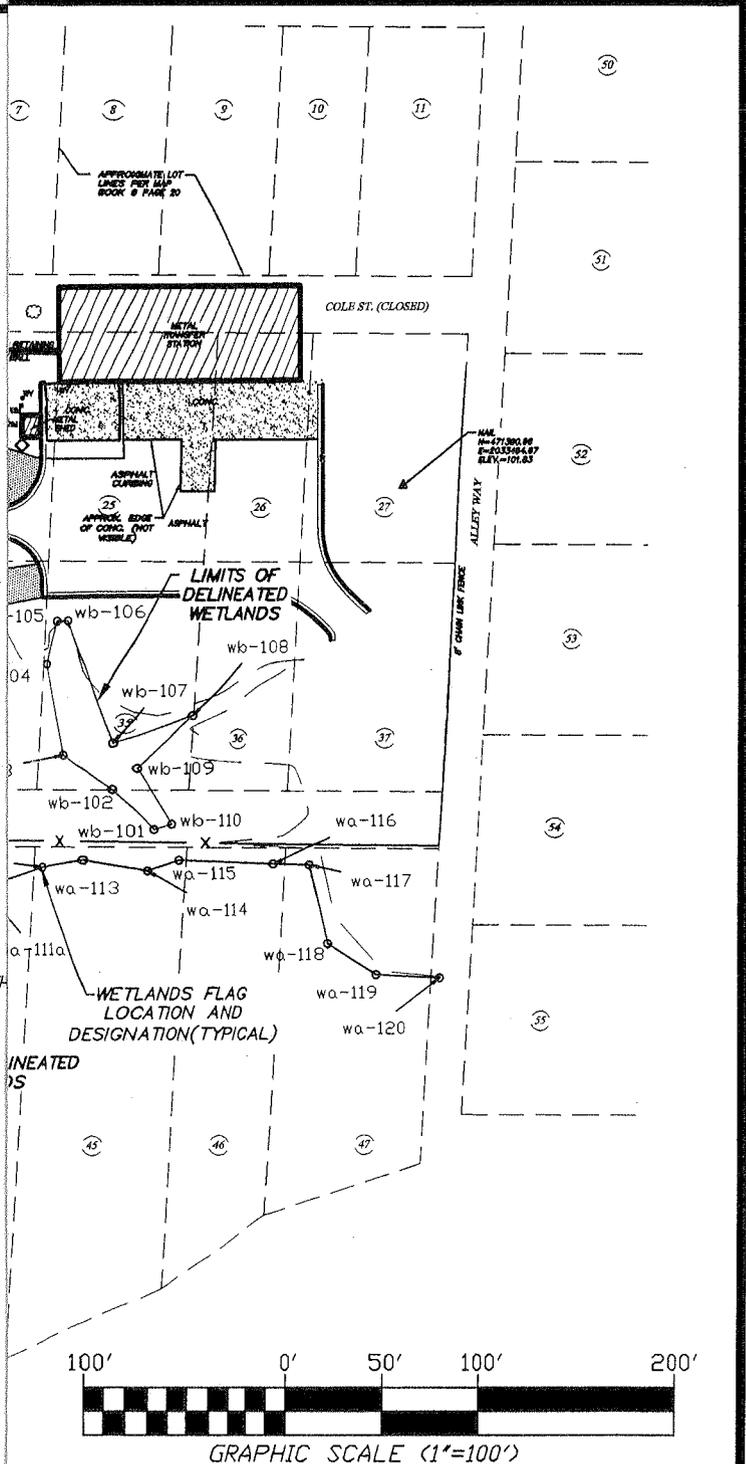
*Dwayne R. Kroeze* 3/27/2009  
 DWAYNE R. KROEZE, P.L.S. L-3911

**NOTES**

1. THIS SURVEY IS NOT INTENDED TO REPRESENT A BOUNDARY SURVEY. PROPERTY LINES SHOWN ARE APPROXIMATE AND ARE FOR REFERENCE PURPOSES ONLY.
2. SITE COORDINATES ARE BASED ON NC GRID NAD 83 (NCRS 2007) AND WERE ESTABLISHED USING GPS WITH VRS CORRECTIONS PROVIDED BY NCGS.
3. WETLAND DELINEATION PROVIDED BY CAROLINA ECOSYSTEMS, INC.

**LEGEND**

- BC BACK OF CURB
- S SIGN
- OHU- OVERHEAD UTILITIES
- GV GAS VALVE/TEST STATION
- GM GAS METER
- ET ELECTRIC TRANSFORMER
- GW GUY WIRE
- ☆ LIGHT POLE
- Ø UTILITY POLE
- ⊙ SEWER MANHOLE
- ▤ YARD INLET
- ▥ CURB INLET
- WM WATER METER
- WV WATER VALVE
- FH FIRE HYDRANT
- ~ TREELINE
- ☼ TREE
- +100.0 SPOT ELEVATION
- 100- INDEX CONTOUR
- INTERMEDIATE CONTOUR
- △ SURVEY CONTROL
- (12) REFERENCE LOT NUMBER



**CURRENT OWNER: CITY OF FAYETTEVILLE**



LOCATION SURVEY FOR THE  
**FAYETTEVILLE**  
**PLANNING PROPERTY**

BERNARD COUNTY

NORTH CAROLINA

JANUARY 19, 2009

PROJECT 09-001

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

**SECTION I: BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:**

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:** City of Fayetteville Transfer Station

State: NC

County/parish/borough: Cumberland

City: Fayetteville

Center coordinates of site (lat/long in degree decimal format): Lat. 35.0452° **N**, Long. -78.8893° **W**.

Universal Transverse Mercator:

Name of nearest waterbody: Blounts Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Cape Fear River

Name of watershed or Hydrologic Unit Code (HUC): 03030004

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**

Office (Desk) Determination. Date:

Field Determination. Date(s):

**SECTION II: SUMMARY OF FINDINGS**

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION.**

There **Pick List** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There **Are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area (check all that apply):<sup>1</sup>**

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

**b. Identify (estimate) size of waters of the U.S. in the review area:**

Non-wetland waters: 525 linear feet: 15 width (ft) and/or acres.

Wetlands: 2.3 acres.

**c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual**

Elevation of established OHWM (if known):

**2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup>**

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain:

<sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup> Supporting documentation is presented in Section III.F.

## SECTION III: CWA ANALYSIS

### A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW  
Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW  
Summarize rationale supporting conclusion that wetland is "adjacent": .

### B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

#### 1. Characteristics of non-TNWs that flow directly or indirectly into TNW

##### (i) General Area Conditions:

Watershed size: **Pick List**  
Drainage area: **Pick List**  
Average annual rainfall: inches  
Average annual snowfall: inches

##### (ii) Physical Characteristics:

###### (a) Relationship with TNW:

- Tributary flows directly into TNW.
- Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.  
Project waters are **Pick List** river miles from RPW.  
Project waters are **Pick List** aerial (straight) miles from TNW.  
Project waters are **Pick List** aerial (straight) miles from RPW.  
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW<sup>5</sup>:  
Tributary stream order, if known: .

<sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

- Tributary is:**  Natural  
 Artificial (man-made). Explain: .  
 Manipulated (man-altered). Explain: .

**Tributary properties with respect to top of bank (estimate):**

Average width: feet  
Average depth: feet  
Average side slopes: **Pick List**.

**Primary tributary substrate composition (check all that apply):**

- |  |  |                                   |
|--|--|-----------------------------------|
| <input type="checkbox"/> Silts           | <input type="checkbox"/> Sands                     | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles         | <input type="checkbox"/> Gravel                    | <input type="checkbox"/> Muck     |
| <input type="checkbox"/> Bedrock         | <input type="checkbox"/> Vegetation. Type/% cover: |                                   |
| <input type="checkbox"/> Other. Explain: |  |                                   |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .

Presence of run/riffle/pool complexes. Explain: .

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime:

Other information on duration and volume: .

Surface flow is: **Pick List**. Characteristics: .

Subsurface flow: **Pick List**. Explain findings:

- Dye (or other) test performed:

Tributary has (check all that apply):

- |   |   |
|---|---|
| <input type="checkbox"/> Bed and banks  |   |
| <input type="checkbox"/> OHWM <sup>6</sup> (check all indicators that apply): |   |
| <input type="checkbox"/> clear, natural line impressed on the bank            | <input type="checkbox"/> the presence of litter and debris          |
| <input type="checkbox"/> changes in the character of soil                     | <input type="checkbox"/> destruction of terrestrial vegetation      |
| <input type="checkbox"/> shelving   | <input type="checkbox"/> the presence of wrack line                 |
| <input type="checkbox"/> vegetation matted down, bent, or absent              | <input type="checkbox"/> sediment sorting                           |
| <input type="checkbox"/> leaf litter disturbed or washed away                 | <input type="checkbox"/> scour                                      |
| <input type="checkbox"/> sediment deposition                                  | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining                                       | <input type="checkbox"/> abrupt change in plant community           |
| <input type="checkbox"/> other (list):  |   |
| <input type="checkbox"/> Discontinuous OHWM. <sup>7</sup> Explain:            |   |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> High Tide Line indicated by:   | <input checked="" type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects      | <input type="checkbox"/> survey to available datum;                    |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings;                            |
| <input type="checkbox"/> physical markings/characteristics         | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges                              |  |
| <input type="checkbox"/> other (list):                             |  |

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain:

Identify specific pollutants, if known:

<sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width): .
- Wetland fringe. Characteristics: .
- Habitat for:
  - Federally Listed species. Explain findings: .
  - Fish/spawn areas. Explain findings: .
  - Other environmentally-sensitive species. Explain findings: .
  - Aquatic/wildlife diversity. Explain findings: .

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is: **Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: .

Ecological connection. Explain: .

Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**.

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

Riparian buffer. Characteristics (type, average width): .

Vegetation type/percent cover. Explain: .

Habitat for:

Federally Listed species. Explain findings: .

Fish/spawn areas. Explain findings: .

Other environmentally-sensitive species. Explain findings: .

Aquatic/wildlife diversity. Explain findings: .

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)      Size (in acres)      Directly abuts? (Y/N)      Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

### C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

**Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:**

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

**Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:**

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

### D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
  - TNWs: linear feet      width (ft), Or,      acres.
  - Wetlands adjacent to TNWs:      acres.
2. **RPWs that flow directly or indirectly into TNWs.**
  - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Watershed is over 6000 acres and Blounts Creek is a large, fourth order stream.
  - Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):

Tributary waters: 525 linear feet 15 width (ft).

Other non-wetland waters:            acres.

Identify type(s) of waters:            .

**3. Non-RPWs<sup>8</sup> that flow directly or indirectly into TNWs.**

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

Tributary waters:            linear feet            width (ft).

Other non-wetland waters:            acres.

Identify type(s) of waters:            .

**4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
- Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **Wetland indicators are present adjacent to the stream channel and a drainage from the wetland ties directly into the stream channel.**
- Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: 2.3 acres.

**5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

**6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area:            acres.

**7. Impoundments of jurisdictional waters.<sup>9</sup>**

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

**E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):<sup>10</sup>**

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain:            .
- Other factors. Explain:            .

<sup>8</sup>See Footnote # 3.

<sup>9</sup>To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup>Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

**Identify water body and summarize rationale supporting determination:**

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.  
Identify type(s) of waters: .
- Wetlands: acres.

**F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):**

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
  - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

**SECTION IV: DATA SOURCES.**

**A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - Office concurs with data sheets/delineation report.
  - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Fayetteville NC.
- USDA Natural Resources Conservation Service Soil Survey. Citation: Cumberland & Hoke Counties NC.
- National wetlands inventory map(s). Cite name: Fayetteville NC.
- State/Local wetland inventory map(s): Division of Coastal Management Wetland Mapping.
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): Cumberland County 2001.  
or  Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .

**B. ADDITIONAL COMMENTS TO SUPPORT JD:**

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Determination Manual)

<b>Project / Site:</b> <u>City of Fayetteville Transfer Station</u> <b>Applicant / Owner:</b> <u>Waste Industries / City of Fayetteville</u> <b>Investigator:</b> <u>Phil May - Carolina Ecosystems, Inc.</u>	<b>Date:</b> <u>12/23/08</u> <b>County:</b> <u>Cumberland</u> <b>State:</b> <u>NC</u>
Do normal circumstances exist on the site? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Is the site significantly disturbed (Atypical situation)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Is the area a potential problem area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (explain on reverse if needed)	<b>Community ID:</b> <u>WA</u> <b>Transect ID:</b> <u>Wet</u> <b>Plot ID:</b> <u>106</u>

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Quercus nigra</u>	<u>T</u>	<u>FAC</u>	9. _____	_____	_____
2. <u>Platanus occidentalis</u>	<u>T</u>	<u>FACW-</u>	10. _____	_____	_____
3. <u>Ligustrum sinense</u>	<u>S</u>	<u>FAC</u>	11. _____	_____	_____
4. <u>Persea borbonia</u>	<u>S</u>	<u>FACW</u>	12. _____	_____	_____
5. <u>Smilax rotundifolia</u>	<u>V</u>	<u>FAC</u>	13. _____	_____	_____
6. <u>Toxicodendron radicans</u>	<u>V</u>	<u>FAC</u>	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW, or FAC excluding FAC-). 100%

**Remarks:**  
Herbaceous species absent in understory due to season. Typha latifolia present in disturbed portion of wetland (historically used as a stormwater drainage connected to wetland via pipe).

**HYDROLOGY**

<input type="checkbox"/> Recorded Data (Describe In Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other  <input checked="" type="checkbox"/> No Recorded Data Available  <b>Field Observations:</b>  Depth of Surface Water: <u>-</u> (in.)  Depth to Free Water in Pit: <u>8</u> (in.)  Depth to Saturated Soil: <u>6</u> (in.)	<b>Wetland Hydrology Indicators</b>  <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12" <input type="checkbox"/> Water Marks <input checked="" type="checkbox"/> Drift Lines <input checked="" type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands  <b>Secondary Indicators:</b> <input checked="" type="checkbox"/> Oxidized Roots Channels in Upper 12" <input checked="" type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input checked="" type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Remarks:</b> Flood plain of Blounts Creek with some drainage patterns and extensive amount of wrack/debris and sediment deposition.	

**SOILS**

Map Unit Name  
(Series and Phase): Roanoke-Urban Land Complex Drainage Class: Poorly

Taxonomy (Subgroup): Typic Ochraquults Confirm Mapped Type? Yes  No

**Profile Description:**

Depth (inches)	Horizon	Matrix Colors (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0	A	10YR 2/1			Loam
4	B	10YR 2/2	10YR 4/6	Common, distinct	Clay loam

**Hydric Soil Indicators:**

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed On Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

**Remarks:**  
Soil profile taken near wetland boundary. Indicators stronger within wetland.

**WETLAND DETERMINATION**

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampling Point	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Within a Wetland?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

**Remarks:**  
Bottomland floodplain wetland along Blounts Creek. Small headwater draining to floodplain through a pipe is lacking woody vegetation due to disturbance (primarily *Typha latifolia*).

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
**(1987 COE Wetlands Determination Manual)**

<b>Project / Site:</b> <u>City of Fayetteville Transfer Station</u> <b>Applicant / Owner:</b> <u>Waste Industries / City of Fayetteville</u> <b>Investigator:</b> <u>Phil May - Carolina Ecosystems, Inc.</u>	<b>Date:</b> <u>12/23/08</u> <b>County:</b> <u>Cumberland</u> <b>State:</b> <u>NC</u>
Do normal circumstances exist on the site? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Is the site significantly disturbed (Atypical situation)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Is the area a potential problem area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (explain on reverse if needed)	<b>Community ID:</b> <u>WA</u> <b>Transect ID:</b> <u>Up</u> <b>Plot ID:</b> <u>106</u>

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Quercus nigra</u>	<u>T</u>	<u>FAC</u>	9. _____	_____	_____
2. <u>Platanus occidentalis</u>	<u>T</u>	<u>FACW-</u>	10. _____	_____	_____
3. <u>Ligustrum sinense</u>	<u>S</u>	<u>FAC</u>	11. _____	_____	_____
4. <u>Hedra helix</u>	<u>V</u>	<u>NI</u>	12. _____	_____	_____
5. <u>Toxicodendron radicans</u>	<u>V</u>	<u>FAC</u>	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW, or FAC excluding FAC-. 80%

**Remarks:**  
 Sparse herb layer dominated by invasive english ivy. Limited diversity of upland vegetation.

**HYDROLOGY**

<input type="checkbox"/> Recorded Data (Describe In Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available <b>Field Observations:</b> Depth of Surface Water: <u>-</u> (in.) Depth to Free Water in Pit: <u>-</u> (in.) Depth to Saturated Soil: <u>-</u> (in.)	<b>Wetland Hydrology Indicators</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12" <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators:</b> <input type="checkbox"/> Oxidized Roots Channels in Upper 12" <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input checked="" type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Remarks:</b> Slope above floodplain elevation .	



**ATTACHMENT 5**

**Erosion & Sediment Control/Stormwater Plan**

**Note for Attachment 5 of Attachment F:  
The Erosion & Sedimentation Control/Stormwater Plan  
is provided in Attachment H.**

**ATTACHMENT 6**

**Engineering Plans**

**Note for Attachment 6 of Attachment F:  
The Engineering Plans  
are provided in Attachment K.**

**ATTACHMENT G**  
**OPERATIONS MANUAL**

k

# **Operations Manual**

**City of Fayetteville  
Transfer Station  
Fayetteville, North Carolina**

Prepared for:  
**Waste Industries, LLC**  
Hope Mills, North Carolina

**May 2009**



**WASTE INDUSTRIES, LLC  
CITY OF FAYETTEVILLE TRANSFER STATION**

**OPERATIONS MANUAL**

**TABLE OF CONTENTS**

		<u>Page</u>
<b>1.</b>	<b>GENERAL FACILITY OPERATIONS</b>	
1.1	Overview .....	1-1
1.2	Contact Information .....	1-1
1.2.1	Operator .....	1-1
1.2.2	Owner .....	1-2
1.2.2	Design Engineer .....	1-2
1.2.2	North Carolina Department of Environment and Natural Resources ..	1-2
1.3	Hours of Operation .....	1-2
1.4	Access Control .....	1-3
1.4.1	Physical Restraints .....	1-3
1.4.2	Security .....	1-3
1.5	Signage .....	1-3
1.6	Communications .....	1-3
1.7	Fire and Safety .....	1-3
1.7.1	Fire Control .....	1-3
1.7.2	Safety .....	1-4
1.8	Severe Weather Conditions .....	1-4
1.8.1	Ice Storms .....	1-4
1.8.2	Heavy Rains .....	1-4
1.8.3	Electrical Storms .....	1-5
1.8.4	Windy Conditions .....	1-5
1.8.5	Violent Storms .....	1-5
1.9	Equipment Requirements .....	1-5
1.10	Personnel Requirements .....	1-5
1.11	Health and Safety .....	1-5
1.11.1	Personal Hygiene .....	1-6
1.11.2	Personal Protective Equipment .....	1-6
1.11.3	Mechanical Equipment Hazard Prevention .....	1-6
1.11.4	Employee Health and Safety .....	1-7
1.11.5	Physical Exposure .....	1-7
1.11.6	Material Safety Data Sheets .....	1-7
1.12	Utilities .....	1-7
1.13	Record Keeping Program .....	1-7

## Table of Contents (Continued)

Page

### 2. WASTE HANDLING OPERATIONS

2.1	Overview .....	2-1
2.2	Acceptable Wastes .....	2-1
2.3	Prohibited Wastes .....	2-1
2.4	Prohibition of Open Burning .....	2-2
2.5	Waste Screening Programs .....	2-2
2.5.1	Trained Personnel .....	2-2
2.5.2	Waste Receiving and Inspection .....	2-2
2.6	Facility Operations .....	2-3
2.6.1	Operating Capacity .....	2-3
2.6.2	Service Area .....	2-3
2.6.3	Disposal Facility .....	2-3
2.6.4	Personnel Requirements .....	2-3
2.6.5	Equipment Requirements .....	2-4
2.6.6	Building Features .....	2-4
2.7	Transfer Operations .....	2-5
2.7.1	Access .....	2-5
2.7.2	General Procedures .....	2-5

### 3. ENVIRONMENTAL MANAGEMENT

3.1	Overview .....	3-1
3.2	Surface Water Control .....	3-1
3.2.1	Erosion Control .....	3-1
3.2.2	Sedimentation Control .....	3-1
3.3	Leachate Management .....	3-1
3.3.1	Leachate Collection .....	3-2
3.3.2	Operation & Maintenance of Leachate Pumps & Storage Tanks .....	3-2
3.4	Vector Control .....	3-2
3.5	Odor Control .....	3-2
3.6	Dust Control .....	3-2
3.7	Windblown Waste Control .....	3-2

### FIGURES

Figure 1	Site Location Map
Figure 2	Site Plan

### APPENDICES

Appendix A	EPA Method 9095 - Paint Filter Liquids Test
Appendix B	Waste Screening Form

# SECTION 1 GENERAL FACILITY OPERATIONS

## 1.1 OVERVIEW

This Operations Manual was prepared for the Fayetteville Transfer Station facility (Permit No. 26-09-T) located at 583 Winslow Street in Fayetteville, North Carolina as shown in **Figure 1**. This document discusses the operation of the transfer station. Refer to **Figure 2** for the general layout of the facility. Waste Industries, LLC is the lessee and the operator. The transfer station is an existing facility (to be modified) that is owned by the City of Fayetteville, North Carolina.

The information contained herein was prepared to provide personnel with an understanding of how the Design Engineer envisioned that the completed facility would be operated. While deviations from the operations outlined here may be acceptable, they should be reviewed and approved by the Design Engineer.

This plan specifically addresses requirements of North Carolina Solid Waste Management Rules *Section .0402 - Operational Requirements*. All personnel involved with the management or supervision of the facility will be familiar with this plan. A copy of this Operations Manual will be kept at the facility and will be available for use at all times.

## 1.2 CONTACT INFORMATION

All correspondence and questions concerning the operation of the Fayetteville Transfer Station should be directed to the appropriate company and regulatory personnel listed below. For fire or police emergencies dial 911.

### 1.2.1 Waste Industries, LLC (Operator)

Local office:

Waste Industries, LLC

4621 Marracco Dr.

Hope Mills, NC 28348

Phone: (910) 423-4122 x32428

Fax: (910) 423-4125

Contact: Carl Massey, General Manager

[carl.massey@wasteindustries.com](mailto:carl.massey@wasteindustries.com)

Main office:

Waste Industries, LLC

3301 Benson Drive, Suite 601

Raleigh, NC 27609

Phone: (919) 325-3000

Fax: (919) 325-4040

Contact: D. Stephen Grissom, CFO

**1.2.2 City of Fayetteville (Owner)**

City of Fayetteville  
433 Hay Street  
Fayetteville, NC 28301-5537  
Phone: (910) 433-1984  
Fax: (910) 433-1516  
Contact: Gerald W. Dietzen, Solid Waste Director  
[gdietzen@ci.fay.nc.us](mailto:gdietzen@ci.fay.nc.us)

**1.2.2 Richardson Smith Gardner & Associates, Inc. (Design Engineer)**

Richardson Smith Gardner & Associates, Inc.  
14 N. Boylan Avenue  
Raleigh, North Carolina, NC 27603  
Phone: (919) 828-0577 x128  
Fax: (919) 828-3899  
Contact: Thomas B. Maier, P.E.  
[tom@rsgengineers.com](mailto:tom@rsgengineers.com)

**1.2.3 North Carolina Department of Environment and Natural Resources (DENR)**

North Carolina DENR - Raleigh Central Office  
401 Oberlin Road, Suite 150  
Raleigh, NC 27605  
Phone: (919) 508-8400  
Fax: (919) 715-3605

Division of Waste Management (DWM) - Solid Waste Section:

Field Operations Branch Head:	Mark Poindexter
Eastern Regional Supervisor:	Dennis Shackelford
Waste Management Specialist:	Drew Hammonds

**1.3 HOURS OF OPERATION**

Waste Industries intends to operate the facility 90 hours per week. The transfer station will be closed for the observance of holidays as established locally. The operating hours will normally be as follows:

Monday through Friday	5:00 am until 8:00 pm
Saturday	5:00 am until 8:00 pm
Sunday	Closed

## **1.4 ACCESS CONTROL**

Limiting access to the solid waste management facility is important for the following reasons:

- Unauthorized and illegal dumping of waste materials is prevented.
- Trespassing, and injury resulting therefrom, is discouraged.
- The risk of vandalism is greatly reduced.

Access to active areas of the transfer station will be controlled by a combination of fences and natural barriers, and strictly enforced operating hours. An attendant will be on duty at all times when the facility is open to enforce access restrictions. The facility is not open to the public.

### **1.4.1 Physical Restraints**

The site will be accessed by two entrances on Winslow Street as shown on **Figure 2**. Scales and a scale house and office are provided at the northern entrance. The northern and southern entrances will have a gate which will be securely locked during non-operating hours. Between the entrances, there will be a fence and a 6-foot high berm.

### **1.4.2 Security**

Frequent inspections of gates and fences will be performed by facility personnel. Evidence of trespassing, vandalism, or illegal operation will be reported to the Owner.

## **1.5 SIGNAGE**

Waste Industries will post signs at the transfer station entrance (i.e., northern driveway) indicating operational procedures, hours of operation, tipping fee, and the permit number. Signs will be clearly posted stating that hazardous or liquid wastes are prohibited. Traffic signs and markers will be provided as necessary to promote an orderly traffic pattern to and from the discharge area and loading area. Signs will prohibit exiting from the southern driveway, which is for the entrance of empty trailer trucks.

## **1.6 COMMUNICATIONS**

The scale house/office have telephones in case of emergency and for the conduct of day-to-day business. Emergency telephone numbers are displayed in the scale house and office.

## **1.7 FIRE AND SAFETY**

### **1.7.1 Fire Control**

The possibility of fire within the transfer station or a piece of equipment must be anticipated in the daily operation of the facility. Fire suppression equipment shall be provided to control accidental fires and arrangements shall be made with the local fire

protection agency. The transfer station building shall be equipped with hose bibs located on each wall of the facility and an appropriate number of fire extinguishers to effectively control accidental fires. A combination of factory installed fire suppression systems and/or portable fire extinguishers will be operational on all heavy pieces of equipment at all times. For larger or more serious outbreaks, the local fire department will respond.

The Operator will verbally notify the DWM (see **Section 1.2.3**) within 24 hours of discovery of a fire within any transfer or recycling area. In addition, written documentation describing the fire, the actions carried out to extinguish the fire, and a strategy for preventing future occurrences will be provided to the DWM within 15 days following any such occurrence.

### **1.7.2 Safety**

All aspects of the operation of the facility were developed with the health and safety of operations staff and neighbors in mind. Prior to commencement of operations, a member of the operating staff will be designated site safety officer. This individual, together with the facility's management, will modify the site safety and emergency response program to remain consistent with National Solid Waste Management Association and Occupational Safety and Health Administration (OSHA) guidance.

Safety equipment provided includes equipment rollover protective cabs, seat belts, audible reverse warning devices, hard hats, safety shoes, and first aid kits. All personnel will be encouraged to complete the American Red Cross Basic First Aid Course. Other safety requirements as designated by the Operator will also be implemented.

## **1.8 SEVERE WEATHER CONDITIONS**

Unusual weather conditions can directly affect the operation of the facility. Some of these weather conditions and recommended operational responses are as follows.

### **1.8.1 Ice Storms**

An ice storm can make access to the facility dangerous, prevent movement and, thus, may require closure of the facility until the ice is removed or has melted.

### **1.8.2 Heavy Rains**

Exposed soil surfaces can create a muddy situation in some portions of the facility during rainy periods. The control of drainage and use of crushed stone on unpaved roads should provide all-weather access for the site and promote drainage away from critical areas. In areas where the aggregate surface is washed away or otherwise damaged, new aggregate should be used for repair.

Intense rains can affect leachate managements systems. As applicable, staff shall maintain adequate temporary storage capacity in the leachate management systems. After such a rain event, inspection by personnel will be initiated and corrective measures taken to dispose of any additional leachate before the next rainfall.

### **1.8.3 Electrical Storms**

The open recycling areas of the facility are susceptible to the hazards of an electrical storm. If necessary, recycling activities will be temporarily suspended during such an event. To guarantee the safety of all field personnel, refuge will be taken in the on-site buildings or in rubber-tired vehicles.

### **1.8.4 Windy Conditions**

Facility operations during a particularly windy period may require that the active tipping area be temporarily shifted to a more sheltered area.

### **1.8.5 Violent Storms**

In the event of hurricane, tornado, or severe winter storm warning issued by the National Weather Service, facility operations may be temporarily suspended until the warning is lifted.

## **1.9 EQUIPMENT REQUIREMENTS**

The Operator will maintain on-site equipment required to perform the necessary transfer and recycling activities. Periodic maintenance of all equipment, and minor and major repair work will be performed at designated maintenance zones.

## **1.10 PERSONNEL REQUIREMENTS**

At least one member of the supervisory staff will be experienced in the management of transfer station operations. Each facility employee will go through an annual training course (led by supervisory staff). As part of this training, personnel will learn to recognize loads which may contain prohibited wastes.

## **1.11 HEALTH AND SAFETY**

This is a general plan and presents minimal information. The operator, Waste Industries, LLC, is responsible for site safety. The health and safety plan prepared and implemented by Waste Industries, LLC supercedes the contents of this general plan.

All aspects of the transfer and recycling center operations were developed with the health and safety of the operating staff and neighbors in mind. Prior to commencement of operations of the facility, a member of the operating staff will be designated site safety officer. This individual,

together with the facility's management, will modify the site safety and emergency response program to remain consistent with National Solid Waste Management Association and Occupational Safety and Health Administration (OSHA) guidance.

Safety equipment provided includes equipment rollover protective cabs, seat belts, audible reverse warning devices, hard hats, safety shoes, and first aid kits. Facility personnel will be encouraged to complete the American Red Cross Basic First Aid Course. Other safety requirements as designated by the Operator will also be implemented.

Each facility employee will go through annual training course in health and safety (led by supervisory staff). All training shall be documented and attested to by signatures of the trainer and trainee. The following are some general recommendations for the health and safety of workers at the Fayetteville Transfer Station.

### **1.11.1 Personal Hygiene**

The following items are recommended as a minimum of practice:

- Wash hands before eating, drinking, or smoking.
- Wear personal protective equipment as described in **Section 1.10.2**.
- Wash, disinfect, and bandage ANY cut, no matter how small it is. Any break in the skin can become a source of infection.
- Keep fingernails closely trimmed and clean (dirty nails can harbor pathogens).

### **1.11.2 Personal Protective Equipment**

Personal Protective Equipment (PPE) must be evaluated as to the level of protection necessary for particular operating conditions and then made available to facility employees. The list below includes the PPE typically used and/or required in a solid waste management facility workplace.

- Safety shoes with steel toes.
- Hearing protection should be used in areas where extended exposure to continuous high decibel levels are expected.
- Disposable rubber latex or chemical resistant gloves for handling and/or sampling of waste materials.
- Dust filter masks

Following use, PPE's should be disposed of or cleaned and dried, or readied for reuse.

### **1.11.3 Mechanical Equipment Hazard Prevention**

The loaders and other equipment should be operated with care and caution. All safety equipment such as horns, backup alarms, and lights should be functional. A Lockout-Tagout program shall be used to identify equipment in need or under repair and insure

that operation is “off-limits” prior to maintenance or repair. All operators shall be trained in the proper operation of equipment.

#### **1.11.4 Employee Health and Safety**

Some general safety rules are:

- Consider safety first when planning and conducting activities.
- Review the equipment O&M Manual prior to attempting repairs/changes.
- Remember the buddy system in case of repair of mechanical equipment
- Post emergency contact phone numbers.
- Provide easy and visible access to the Right to Know materials.
- Provide easy and visible access to the first aid kit and fire extinguishers.

#### **1.11.5 Physical Exposure**

Facility personnel may come in contact with the fluids, solids, and airborne constituents found at the transfer and recycling center. Routine training should be conducted regarding the individual and collective materials used in the recycling process and their associated hazards. Training concerning safe work practices around these potential exposures should use equipment and proper disposal procedures.

#### **1.11.6 Material Safety Data Sheets**

Material Safety Data Sheets (MSDS) shall be collected on every waste (if available) that enters the facility. Information shall also be made available for all chemicals stored on site for use by the County. MSDS sheets shall be stored in a location with all other Right to Know information for the site.

### **1.12 UTILITIES**

Electrical power, water, and telephone will be provided at the scale house/office. Restrooms will be provided at the site.

### **1.13 RECORD KEEPING PROGRAM**

The Operator will maintain the following records in an operating record at the landfill:

- A. Waste inspection records (see **Section 2.5**);
- B. Daily tonnage records - including source of generation, scale certifications;
- C. Waste determination records;
- D. List of generators and haulers that have attempted to dispose of restricted wastes;
- E. Employee training procedures and records of training completed;
- F. Annual facility reports;
- G. Cost estimates or financial assurance documentation.

The operating record will be kept up to date and will be presented upon request to the DWM for inspection. A copy of this **Operations Manual** will be kept at the facility and will be available for use at all times.

## SECTION 2 WASTE HANDLING OPERATIONS

### 2.1 OVERVIEW

This section describes the required waste handling operations for the City of Fayetteville Transfer Station.

### 2.2 ACCEPTABLE WASTES

Only the waste as defined by NCGS 130A-290(a)(18a) may be received at the MSW transfer station.

Waste will be collected from the permitted service area of Bladen, Chatam, Columbus, Cumberland, Duplin, Durham, Franklin, Harnett, Hoke, Johnston, Lee, Montgomery, Moore, Orange, Richmond, Robeson, Sampson, Scotland, Wake and Wayne Counties. The routes are served by Waste Industries, LLC, the City of Fayetteville, and other solid waste collection companies. The waste is generated by residences, municipalities, industries, businesses and other entities within these counties.

### 2.3 PROHIBITED WASTES

Only wastes as defined in **Section 2.2** above may be accepted in the MSW transfer station. No other wastes may be accepted including the following wastes:

- Whole Scrap Tires
- Used Oil
- White Goods
- Lead Acid Batteries
- Yard Waste
- Construction and Demolition Debris (C&D)
- Discarded computer equipment
- Oyster Shells
- Plastic beverage containers (Except in recovered material storage)
- Aluminum Cans (Except in recovered material storage)
- Pallets (Except in recovered material storage)
- Cardboard (Except in recovered material storage)

In addition, operating criteria prohibit other materials from receipt within the MSW transfer station. These materials include:

- Hazardous waste as defined by NCGS 130A-290(a)(8), including hazardous waste from conditionally exempt small quantity generators.
- Polychlorinated biphenyls (PCB) wastes as defined in 40 CFR 761 with the exception of trace amounts found in materials such as consumer electronics.

- Bulk or non-containerized liquid wastes unless the waste is household waste other than septic waste and waste oil; or the waste is leachate or gas condensate derived from the MSW landfill unit. A liquid determination will be performed by the paint filter test (see **Appendix A** for apparatus and procedure).
- Containers holding liquid wastes unless the waste is household waste.

## **2.4 PROHIBITION OF OPEN BURNING**

Open burning of waste is prohibited at the transfer station.

## **2.5 WASTE SCREENING PROGRAMS**

### **2.5.1 Trained Personnel**

In order to assure that prohibited wastes are not entering the facility, screening programs have been implemented. Trained personnel will be on duty during all hours of operation. These individuals have been trained to spot indications of suspicious wastes, including: hazardous placarding or markings, liquids, powders or dusts, sludges, bright or unusual colors, drums or commercial size containers, and "chemical" odors. Screening programs for visual and olfactory characteristics of prohibited wastes are an ongoing part of the facility operation.

### **2.5.2 Waste Receiving and Inspection**

All vehicles carrying waste must stop at the scale house located at the entrance of the facility and visitors are required to sign-in. All waste transportation vehicles are weighed and the content of the load assessed. The scale attendant(s) requests from the driver of the vehicle a description of the waste it is carrying to ensure that unacceptable waste is not allowed into the facility. The attendant(s) then visually checks the vehicle as it crosses the scale. Signs informing users of the acceptable and unacceptable types of waste are posted at the scale house. Once passing the scales, the vehicles are routed to the transfer area.

Vehicles are randomly selected for screening on a regular basis, depending on personnel availability. At least one vehicle per week will be randomly selected by inspection personnel. A random truck number and time will be selected (e.g., the tenth load after 10:00 a.m.) on the day of inspections. However, if something suspicious is spotted in any waste load, that load is inspected further.

Vehicles selected for inspection are directed to an area on the tipping floor where the vehicle will be unloaded. Waste is carefully spread using suitable equipment. An attendant trained to identify wastes that are unacceptable inspects the waste discharged at the screening area. If unacceptable waste is found, the load will be isolated, reloaded, and the generator/hauler will be logged and escorted out of the facility. For unacceptable wastes that are non-hazardous, the Owner will then notify officials of the DWM (see

**Section 1.2.3)** within 24 hours of attempted disposal of any waste the facility is not permitted to receive in order to determine the proper course of action. The hauler is responsible for removing unacceptable waste from the facility property.

If no unacceptable waste is found, the load will be pushed into a transfer trailer and/or equipment. All random waste inspections will be documented by operations staff using the waste screening form provided in **Appendix B**.

In addition to random waste screening described above, waste unloaded on the tipping floor will be inspected by the equipment operators, trained to spot unacceptable wastes, before and during pushing into the transfer trailers. Any suspicious looking waste is reported immediately to the designated primary inspector for further evaluation.

## **2.6 FACILITY OPERATIONS**

### **2.6.1 Operating Capacity**

The theoretical maximum operating capacity for the transfer station is estimated to be approximately 1,500 tons per day temporarily under circumstances such as disaster clean-up. The facility will normally operate below maximum capacity.

### **2.6.2 Service Area**

The permitted service area for the transfer facility (subject to change) is Bladen, Chatam, Columbus, Cumberland, Duplin, Durham, Franklin, Harnett, Hoke, Johnston, Lee, Montgomery, Moore, Orange, Richmond, Robeson, Sampson, Scotland, Wake and Wayne Counties, North Carolina.

### **2.6.3 Disposal Facility**

The anticipated disposal facility for the transfer station (subject to change) is:

- Sampson County Disposal, LLC Landfill (Permit No. 82-02).

Alternate disposal sites are county landfills in Robeson, Cumberland, Uwharrie, Johnston, and Wayne Counties.

### **2.6.4 Personnel Requirements**

The anticipated personnel requirements for operation and maintenance of the site are listed in the following table. Commercial drivers are not considered site personnel.

<b>Description</b>	<b>Primary Function (Allocation)</b>
1) Site Manager	Overall management of the facility
2) Scalehouse Attendant	Receiving and weight for incoming loads
3) Tipping Floor Attendant	Management of tipping floor
4) Operator	Transfer of waste from tipping floor to trailers

### **2.6.5 Equipment Requirements**

The anticipated equipment requirements for operation and maintenance of the site are listed in the following table. Trucks and trailers are not considered site equipment.

<b>Description</b>	<b>Primary Function (Allocation)</b>
1) Front End Loader	Loading, recycling, and site cleanup
2) Skid Steer Loader	Loading, recycling, and site cleanup
3) Trucks and Transfer Trailers	Receiving waste and moving trailers on site.
4) Roll-off Dumpsters	Receiving recovered recyclable materials

### **2.6.6 Building Features**

The anticipated building features of the transfer area are listed in the following table.

<b>Description of Feature</b>	<b>Present</b>
1) Roof	Yes
2) Sides (3)	Yes
3) Concrete Floor	Yes
4) Leachate Collection and Storage	Yes
5) Ventilation	Yes
6) Water Supply	Yes
7) Lighting	Yes
8) Interior Office & Bathrooms	Yes
9) Explosive Gas Monitoring	Yes
10) Communications (Telephone, Radios, Cell Phones)	Yes
11) Fire Suppression/Sprinkler System	No

## 2.7 TRANSFER OPERATIONS

### 2.7.1 Access

Traffic will be clearly directed to the appropriate area (unloading or loading). Traffic speed on the site should be less than 10 MPH. Rutting of gravel roadway surfaces must be repaired by placement of additional gravel on the roadway and not solely by grading the rut. This will maintain the separator geotextile placed below most gravel roadway surfaces.

### 2.7.2 General Procedures

The transfer operations will be conducted in accordance with the approved Operations Manual and conditions of the Solid Waste Permit issued by the North Carolina Division of Solid Waste Management (DWM).

Facility operations are anticipated as follows:

1. Collection vehicles delivering waste to the facility will enter through the northern driveway;
2. Pass by the scalehouse and over the scales for weight; and
3. Continue along the access road until reaching the covered 12,000 square foot tipping floor.
4. The tipping floor has a “push” wall running along one side of the interior of the building. A loader will lift the waste over the wall into an open-top transfer trailer on the lower level of the building. The transfer trailers will enter through the southern driveway and exit through the northern driveway.
5. Site personnel will direct vehicles waiting to unload, to back into the facility through the entrance. Adequate area is available in front of the building for drivers to turn their vehicles into a backing maneuver. Site personnel will be on the tipping floor to direct and guide the vehicles.
5. The vehicles will back onto the tipping floor to an area designated by site personnel.
6. Once a vehicle is in position, its waste load will be discharged directly onto the tipping floor.
7. A spotter will inspect the discharged waste before it is mixed with other waste on the tipping floor and pushed by a rubber-tired loader into the open top transfer trailers, specifically designed for hauling MSW, located in the lower level of the transfer station.
8. At Waste Industries discretion, or as may be required by law, the following recyclable materials will be separated and placed in roll-off dumpsters: aluminum and plastic beverage containers, pallets, and cardboard. Roll-offs will be stored in one of the trailer storage areas until they are full, and will then be transported off site.

9. All MSW waste will stay in the covered area of the transfer station. The trailers will be moved after they are loaded and will await transport to the Sampson County Landfill, owned and operated by Waste Industries, or alternate facility.
10. Waste can be stored in covered transfer trailers at the facility after hours, but no longer than 48 hours. The 48 hour limit does not apply to recovered recyclable materials.

## SECTION 3 ENVIRONMENTAL MANAGEMENT

### 3.1 OVERVIEW

This section reviews the overall environmental management tasks required for the successful operation of the facility.

### 3.2 SURFACE WATER CONTROL

As used herein, the definition of “surface water” is water which results from precipitation or site run-on that has not contacted the waste.

Proper control of surface water at the transfer area will accomplish the following goals:

- Prevent the run-on of surface water into waste handling area(s);
- Prevent the run-off of surface water that has come into contact with the waste (i.e. leachate);
- Limit the erosion caused by surface waters; and
- Limit sediments carried off-site by surface waters.

Separate erosion and sedimentation control plans are being provided to the North Carolina Division of Land Resources. These plans describe both short and long term engineered features and practices for preventing erosion and controlling sedimentation at this site.

#### 3.2.1 Erosion Control

Erosion control measures have been taken within the drainage channels and at points of stormwater discharge. All site features should be inspected regularly for erosion damage and promptly repaired.

#### 3.2.2 Sedimentation Control

Stormwater run-off from the site is conveyed to an on-site sediment basin. The basin should be inspected regularly for sediment build-up or erosion damage. The basin should be cleaned out when sediment reaches the sediment cleanout elevation.

### 3.3 LEACHATE MANAGEMENT

The leachate management system for the proposed transfer station consists of the concrete tipping floor, collection trenches and leachate transmission piping, pumps, valve boxes, valves, and a direct connection to the City of Fayetteville sewer system.

### **3.3.1 Leachate Collection**

The tipping floor is graded to drain away from the building entrance. Leachate from the tipping floor is collected in perimeter floor drains that drain to a central leachate sump. From the sump, leachate is pumped via an HDPE force main to the existing on-site connection to the City of Fayetteville sewer system.

### **3.3.2 Operation and Maintenance of Leachate Pumps**

Operation and maintenance of leachate pumps shall be in accordance with the appropriate manufacturer's recommendations. The Solid Waste Manager or his designee will be responsible for following and documenting, as required, these activities.

## **3.4 VECTOR CONTROL**

Waste Industries will provide effective vector control measures for the protection of human health. Disease vectors are any rodent, insect, or other animal capable of transmitting disease to humans. Disease vectors will be controlled by implementation of a daily cleaning program including removal of waste, leachate, and wash water from the operations area. Waste Industries will use wash water to keep the tipping floor and drive-thru areas clean and free of rodents, flies, and other animals. Stagnant ponded water will be prevented to control mosquito breeding. Full or partially filled transfer trailers will be covered if left on site overnight. Waste will not be stored on the tipping floor overnight. If vector control becomes a problem, additional measures will be taken to ensure the protection of human health.

## **3.5 ODOR CONTROL**

Odorous or potentially odorous materials will be pushed into a transfer truck and covered as soon as possible to avoid odor problems. Additionally, the transfer areas will be cleaned and swept daily and washed down weekly, at a minimum. If odor control becomes a problem, additional measures will be taken to ensure odor control.

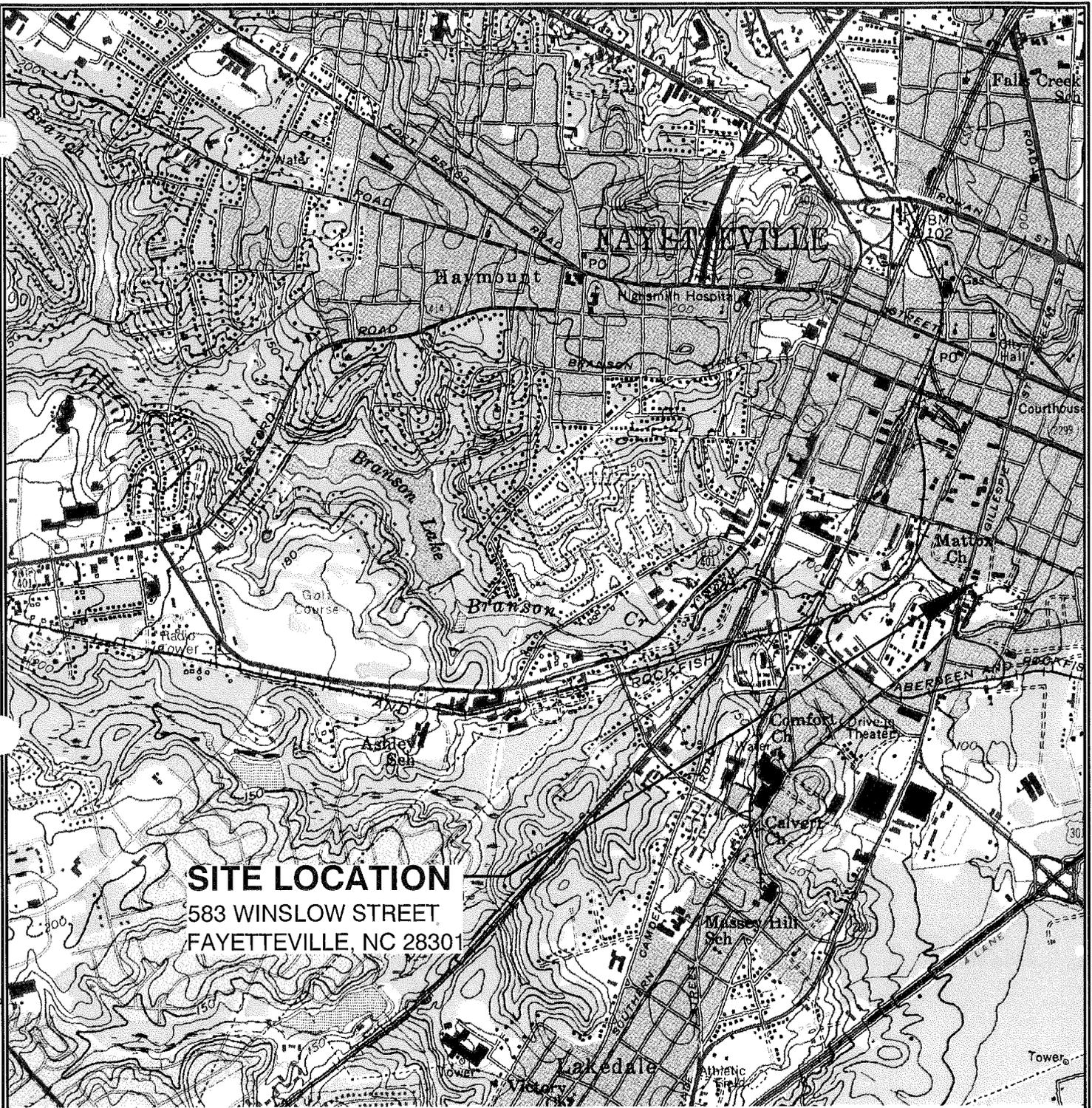
## **3.6 DUST CONTROL**

Dust related to waste hauler traffic on the access roads will be minimized by using a water truck or a sprinkler system to limit dust on the gravel portion of the road.

## **3.7 WINDBLOWN WASTE CONTROL**

All incoming vehicles with waste are required to have their loads covered upon arrival at the site or be fully enclosed. Outbound transfer trailers are also required to be covered. On a daily basis, site personnel will police the site for windblown litter. Since the transfer station is enclosed on three sides, windblown waste should not be a major concern. If needed, litter fences will be installed to intercept windblown waste.

**FIGURES**



**SITE LOCATION**

583 WINSLOW STREET  
 FAYETTEVILLE, NC 28301

REFERENCE: TOPOGRAPHY REFERENCES U.S.G.S. 7.5 MIN. QUADRANGLE "FAYETTEVILLE, N.C.", DATED 1957, PHOTOREVISED 1987.

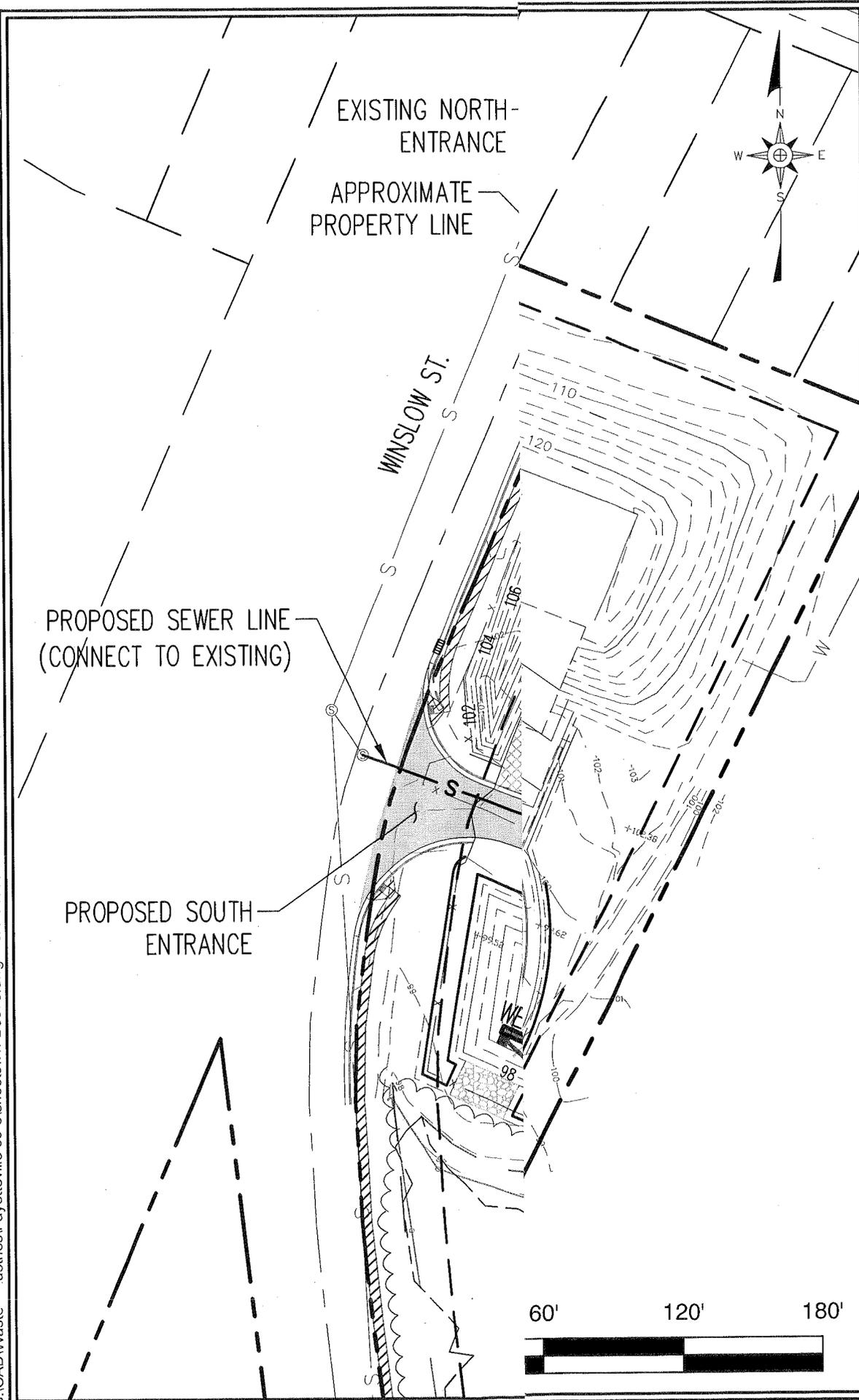
**CITY OF FAYETTEVILLE  
 TRANSFER STATION  
 SITE LOCATION MAP**

**RICHARDSON SMITH GARDNER  
 & ASSOCIATES**

14 N. Boylan Ave. Raleigh, N.C. 27603 www.rsgengineers.com ph: 919-828-0577 fax: 919-828-3899

G:\CAD\Wastw... istics\Fayetteville 09-8\sheets\WI-A0574.dwg - 5/11/2009 3:39 PM

SCALE:	DRAWN BY:	CHECKED BY:	DATE:	PROJECT NO.	FIGURE NO.	FILE NAME
AS NOTED	W.R.B.	T.B.M.	May. 2009	FAYETTEVILLE 09-8	1	WI-A0574




**RICHARDSON SMITH GARDNER & ASSOCIATES**  
 14 N. Boylan Ave.  
 Raleigh, N.C. 27603  
 www.rsengineering.com  
 ph: 919-828-0577  
 fax: 919-828-3869

DRAWN BY: W.R.B.	CHECKED BY: T.B.M.	SCALE: AS NOTED	FIGURE NO. 2
DATE: May, 2009	PROJECT NO. FAYETTEVILLE 09-8	FILE NAME WI-B0575	

TITLE:  
**CITY OF FAYETTEVILLE  
 TRANSFER STATION  
 SITE PLAN**

**APPENDIX A**  
**EPA METHOD 9095**  
**PAINT FILTER LIQUIDS TEST**

**METHOD 9095**  
**PAINT FILTER LIQUIDS TEST**  
**From EPA SW-846**

**1.0 SCOPE AND APPLICATION**

- 1.1 This method is used to determine the presence of free liquids in a representative sample of waste.
- 1.2 The method is used to determine compliance with 40 CFR 264.314 and 265.314.

**2.0 SUMMARY OF METHOD**

- 2.1 A predetermined amount of material is placed in a paint filter. If any portion of the material passes through and drops from the filter within the 5 minute test period, the material is deemed to contain free liquids.

**3.0 INTERFERENCES**

- 3.1 Filter media were observed to separate from the filter cone on exposure to alkaline materials. This development causes no problem if the sample is not disturbed.

**4.0 APPARATUS AND MATERIALS**

- 4.1 Conical paint filter: Mesh number 60 (fine meshed size). Available at local paint stores such as Sherwin-Williams and Glidden for an approximate cost of \$0.07 each.
- 4.2 Glass funnel: If the paint filter, with the waste, cannot sustain its weight on the ring stand, then a fluted glass funnel or glass funnel with a mouth large enough to allow at least 1 inch of the filter mesh to protrude should be used to support the filter. The funnel is to be fluted or have a large open mouth in order to support the paint filter yet not interfere with the movement, to the graduated cylinder, of the liquid that passes through the filter mesh.
- 4.3 Ring stand and ring or tripod.
- 4.4 Graduated cylinder or beaker: 100-mL.

**5.0 REAGENTS**

- 5.1 None.

## **6.0 SAMPLE COLLECTION, PRESERVATION, AND HANDLING**

- 6.1 All samples must be collected according to the directions in Chapter Nine of EPA SW-846.
- 6.2 A 100 mL or 100 g representative sample is required for the test. If it is not possible to obtain a sample of 100 mL or 100 g that is sufficiently representative of the waste, the analyst may use larger size samples in multiples of 100 mL or 100 g, i.e., 200, 300, 400 mL or g. However, when larger samples are used, analysts shall divide the sample into 100-mL or 100-g portions and test each portion separately. If any portion contains free liquids, the entire sample is considered to have free liquids.

## **7.0 PROCEDURE**

- 7.1 Assemble test apparatus as shown in Figure 1.
- 7.2 Place sample in the filter. A funnel may be used to provide support for the paint filter.
- 7.3 Allow sample to drain for 5 minutes into the graduated cylinder.
- 7.4 If any portion of the test material collects in the graduated cylinder in the 5-min. period, then the material is deemed to contain free liquids for purposes of 40 CFR 264.314 and 265.314.

## **8.0 QUALITY CONTROL**

- 8.1 Duplicate samples should be analyzed on a routine basis.

## **9.0 METHOD PERFORMANCE**

- 9.1 No data provided.

## **10.0 REFERENCES**

- 10.1 None required.

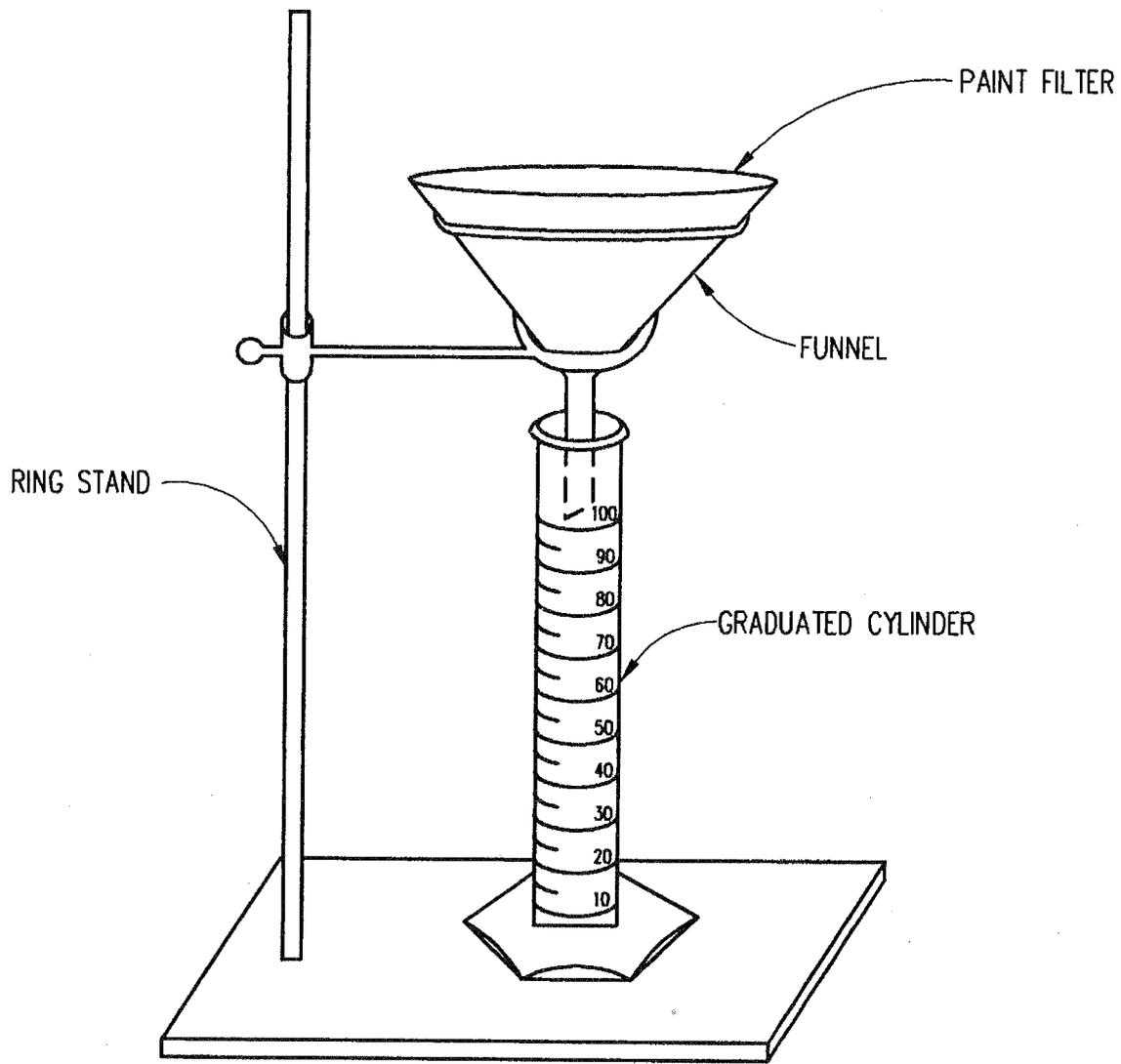
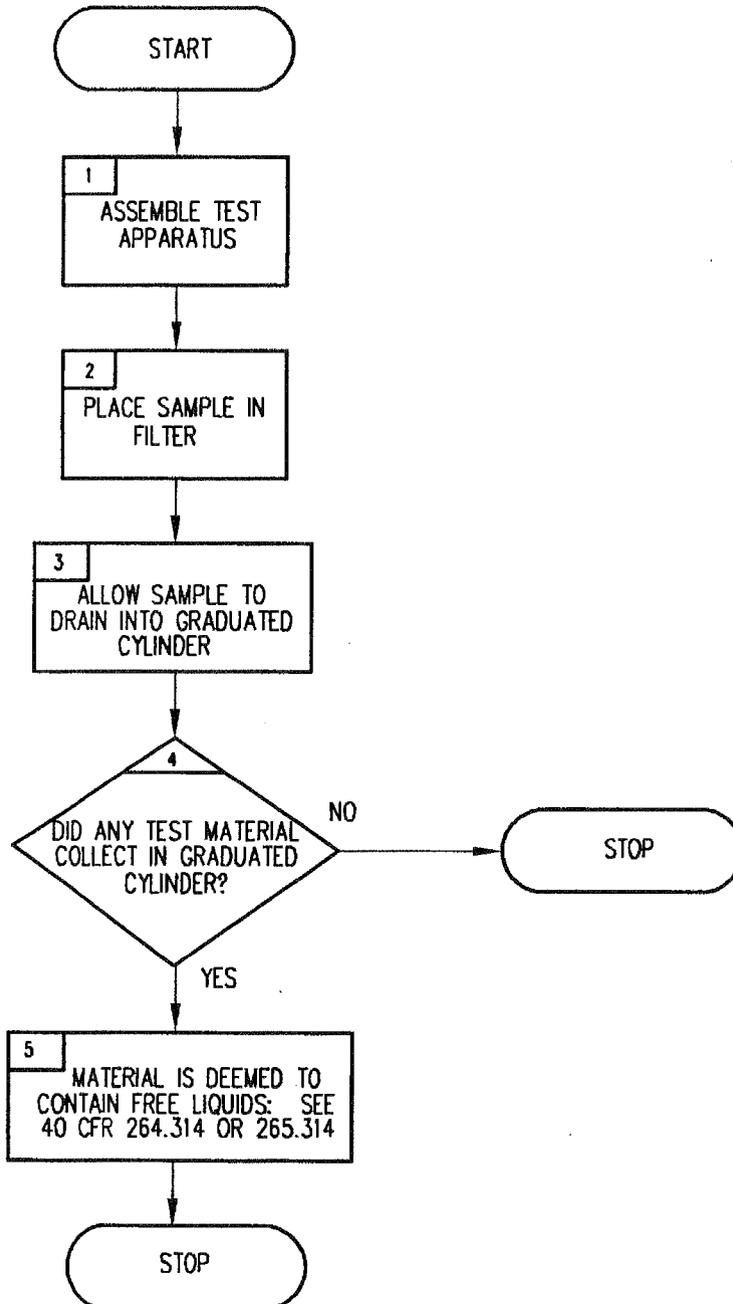


FIGURE 1. PAINT FILTER TEST APPARATUS.

METHOD 9095  
PAINT FILTER LIQUIDS TEST



**APPENDIX B**  
**WASTE SCREENING FORM**

Shotwell Transfer Station, Inc.  
Thornton Road Mixed Waste Transfer & Recycling Center

**WASTE SCREENING FORM**

Day / Date: \_\_\_\_\_ Time Weighed in: \_\_\_\_\_  
Truck Owner: \_\_\_\_\_ Driver Name: \_\_\_\_\_  
Truck Type: \_\_\_\_\_ Vehicle ID / Tag No: \_\_\_\_\_  
Weight: \_\_\_\_\_ Tare: \_\_\_\_\_  
Waste Generator / Source: \_\_\_\_\_

---

Reason Load Inspected:      Random Inspection      \_\_\_\_\_      Staff Initials      \_\_\_\_\_  
   Detained at Scales      \_\_\_\_\_      Staff Initials      \_\_\_\_\_  
   Detained by Operating Staff      \_\_\_\_\_      Staff Initials      \_\_\_\_\_

Inspection Location: \_\_\_\_\_

Approved Waste Determination Form Present?    Yes    \_\_\_\_\_    No    \_\_\_\_\_    N/A    \_\_\_\_\_

Description of Load: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Load Accepted (signature)      \_\_\_\_\_      Date      \_\_\_\_\_  
Load Not Accepted (signature)      \_\_\_\_\_      Date      \_\_\_\_\_

---

Reason Load Not Accepted (complete only if load not accepted)

Description of Suspicious Contents:      Color      \_\_\_\_\_      Haz. Waste Markings      \_\_\_\_\_  
   Texture      \_\_\_\_\_  
   Drums Present      \_\_\_\_\_      Smell      \_\_\_\_\_  
   Est. Cu. Yds. Present in Load      \_\_\_\_\_  
   Est. Tons Present in Load      \_\_\_\_\_

Emergency Management Contacted?    Yes    \_\_\_\_\_    No    \_\_\_\_\_

Company or Authority Contacted? \_\_\_\_\_  
Hazardous Materials Present: \_\_\_\_\_

---

Hauler Notified (if waste not accepted)      Phone:      Time Contacted:  
Other Observations: \_\_\_\_\_  
\_\_\_\_\_

Final Disposition  
Signed      \_\_\_\_\_      Date      \_\_\_\_\_  
   Waste Screening Inspector or Solid Waste Manager

Attach related correspondence to this form.  
File completed form in Operating Record.

**ATTACHMENT H**  
**EROSION AND SEDIMENTATION CONTROL PLAN**



**RICHARDSON SMITH GARDNER & ASSOCIATES, INC.**

**Engineering and Geological Services**

May 21, 2009

Ms. Evangelyn Lowery-Jacobs  
*Assistant Regional Engineer*  
**Division of Land Resources**  
Land Quality Section  
225 Green Street, Suite 714  
Fayetteville, North Carolina 28301-5043

Re: **Response to May 15, 2009 Comments**  
**Erosion and Sedimentation Control/Stormwater Plan**  
**Fayetteville Transfer Station**  
**Fayetteville, North Carolina**

Dear Ms. Lowery-Jacobs,

On behalf of Waste Industries, Richardson Smith Gardner & Associates, Inc (RSG) is submitting responses to additional comments regarding the *Erosion and Sedimentation Control/Stormwater Plan* (the E&S plan) for the Fayetteville Transfer Station contained in the May 15, 2009 Letter of Disapproval from Mr. Steve Cook.

Six of the nine drawings included in the E&S plan (titled *Permit to Construct Drawings*) have been revised in response to comments, and a tenth drawing has been added. Two complete sets of ten drawings are **attached**. Each comment from May 15 is presented below followed by a response.

**Comment No. 1**

*Provide a temporary/permanent-seeding schedule for the entire year. Include maintenance requirements for all methods of vegetative stabilization.*

**Response No. 1**

The permanent seeding schedule has been moved from Drawing S3 to new Drawing EC3. A year-round temporary seeding schedule, as well as maintenance requirements for temporary and permanent vegetation, has been added to Drawing EC3. The maintenance requirements for permanent vegetation were copied from the specifications contained in the E&S plan.

**Comment No. 2**

*Include the groundcover statutes on the site plan.*

**Response No. 2**

The groundcover statutes have been added to Drawing S3.

**Comment No. 3**

*Provide outlet protection for culvert C-3. Include all calculations necessary to determine adequate sizing. Show the dimensions for the dissipater on the site plan. Outlet protection should be designed as flared end sections.*

**Response No. 3**

Outlet protection for culvert C-3 has been added to Drawings S2 and S3, and a detail has been added to Drawing EC3. The design chart used to size the riprap apron is **attached**.

**Comment No. 4**

*Provide a plan detail, construction specifications, and maintenance requirements for sediment fence, and outlet protection.*

**Response No. 4**

The requested details/specifications and maintenance requirements are provided on Drawing EC3.

**Comment No. 5**

*Show all proposed hardware cloth and gravel inlet protection on the site plan.*

**Response No. 5**

Inlet protection is called out at three locations on Drawing S3.

**Comment No. 6**

*The current plan shows sediment fence blocking the outlet weir of the detention basin. Please address this issue to prevent impeded flow.*

**Response No. 6**

A note has been added to Detail 5 on Sheet EC1 specifying the removal of this section of fence upon completion of the low-velocity outlet.

**Comment No. 7**

*The proposed sewer line is located outside the limits of disturbance, along the south entrance of Winslow Street.*

**Response No. 7**

On Drawing S2, the limit of disturbance has been extended to include the sewer line connection.

**Comment No. 8**

*Provide a construction entrance, as necessary, to prevent sediment from entering the street.*

Ms. Evangelyn Lowery-Jacobs  
May 21, 2009  
Page 3

**Response No. 8**

A construction entrance has been added to Drawing S1. A detail has been added to Drawing EC3.

We appreciate your assistance in this review process.

Sincerely,  
**Richardson Smith Gardner & Associates, Inc.**



Thomas B. Maier, P.E.  
Senior Project Engineer x128  
[tom@rsgengineers.com](mailto:tom@rsgengineers.com)

Attachments (May 15 Letter; Outlet Protection Design Chart, 2 Sets of Drawings)

Copies to: Carl Massey, Waste Industries  
John Larch, City of Fayetteville



REC'D MAY 18 2009

North Carolina Department of Environment and Natural Resources

Division of Land Resources

Land Quality Section

James D. Simons, PG, PE  
Director and State Geologist

Beverly Eaves Perdue, Governor  
Dee Freeman, Secretary

May 15, 2009

**LETTER OF DISAPPROVAL**

**CERTIFIED MAIL**

**RETURN RECEIPT REQUESTED**

**CERTIFIED RECEIPT #: 7008 1300 0001 1492 6253**

Waste Industries, LLC  
Attn: D. Stephen Grissom, CFO  
3301 Benson Drive, Suite 601  
Raleigh, NC 27609-

**RE: Project Name:** City of Fayetteville Transfer Station  
**Project ID:** CUMBE-2009-101  
**County:** Cumberland **City/Township:** Fayetteville **Highway/Street:** Winslow Street  
**River Basin:** Cape Fear **Stream Classification:** Other  
**Submitted By:** Richardson Smith Gardner & Associates, Inc.  
**Date Plan Received by LQS:** 4/15/2009  
**Date Fee Received by LQS:** 4/15/2009  
**Plan Type:** New

Dear Mr. Grissom:

The erosion and sedimentation control plan submitted for the subject project has been reviewed and is disapproved for the reasons listed on the attached sheet. This office has 30 days from the Date Plan Received or Date Fee Received, whichever is later, to review new plans and 15 days from the Date Plan Received for a revised plan to review revised plans.

You may submit a revised erosion and sedimentation control plan for approval addressing those items outlined on the enclosed form. Under the authority of NCGS 113A-54.1(a), this office has 15 days from the date of receipt to approve or disapprove your revised plan. However, if you wish to contest the disapproval of this plan, you must request an administrative hearing within 60 days of your receipt of this Letter of Disapproval. This request must be in the form of a written petition, conforming to Chapter 150B of the North Carolina General Statutes, and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714.

Letter of Disapproval  
Waste Industries, LLC  
May 15, 2009  
Page 2 of 3

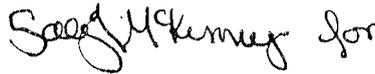
A copy of the petition must be served on this Department as follows:

Office of General Counsel  
Department of Environment and Natural Resources  
1601 Mail Service Center  
Raleigh, North Carolina 27699-1601

Pending approval of a revised plan or a decision on an appeal, commencement of any land-disturbing activity associated with this project shall constitute a violation of the Sedimentation Pollution Control Act of 1973 (NCGS 113A-51 through 66).

Please feel free to contact Evangelyn Lowery-Jacobs of this office at your convenience if you have any questions or if we can provide any assistance in resolving this matter.

Sincerely,



M. Stephen Cook, C.P.E.S.C.  
Regional Engineer  
Land Quality Section

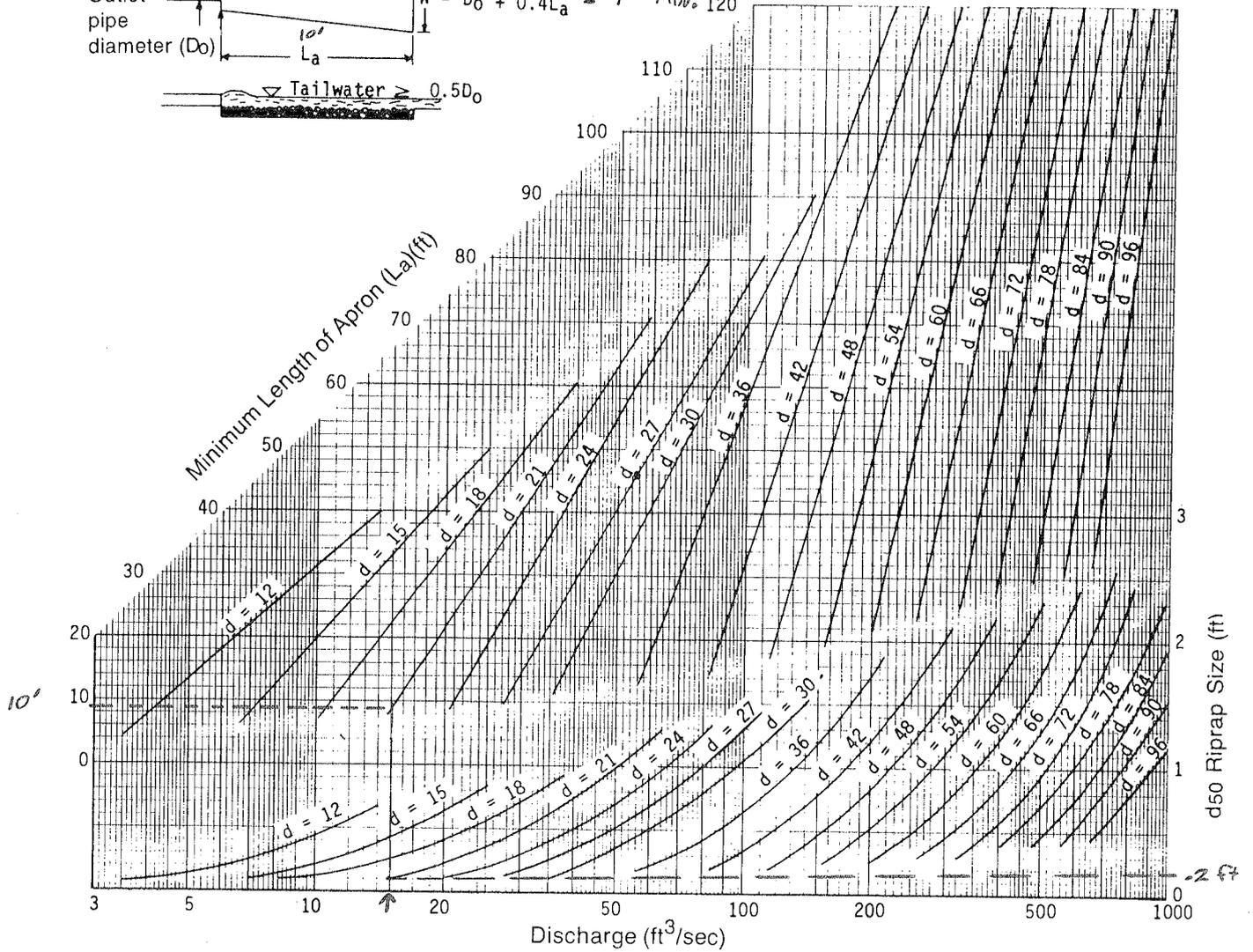
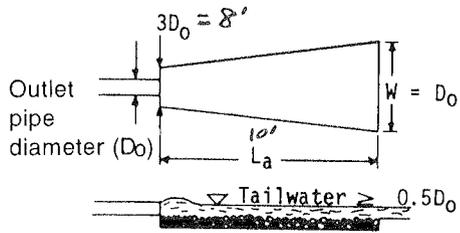
Enclosure: Reasons for Disapproval

Cc: Richardson Smith Gardner & Associates, Inc.  
David Steinmetz, Building Inspector  
Land Quality Section - Fayetteville Regional Office File

## REASONS FOR DISAPPROVAL

Project Name: City of Fayetteville Transfer Station  
Project ID: CUMBE-2009-101  
County: Cumberland

1. Provide a temporary/permanent-seeding schedule for the entire year. Include maintenance requirements for all methods of vegetative stabilization.
2. Include the groundcover statutes on the site plan.  
**The angle for graded slopes and fills shall be no greater than the angle that can be retained by vegetative cover or other adequate erosion-control devices or structures. In any event, slopes left exposed will, within 21 calendar days of completion of any phase of grading, be planted or otherwise provided with temporary ground cover, devices or structures sufficient to restrain erosion. Permanent groundcover will be provided for all disturbed areas within 15 working days or no more than 90 calendar days. (per General Statute 113A-57 paragraph (2) & (3)).**
3. Provide outlet protection for culvert C-3. Include all calculations necessary to determine adequate sizing. Show the dimensions for the dissipator on the site plan. Outlet protection should be designed as flared end sections. **See the Erosion and Sediment Control Planning and Design Manual P.6.41.1 & 8.06.1.**
4. Provide a plan detail, construction specifications, and maintenance requirements for sediment fence, and outlet protection.
5. Show all proposed hardware cloth and gravel inlet protection on the site plan.
6. The current plan shows sediment fence blocking the outlet weir of the detention basin. Please address this issue to prevent impeded flow.
7. The proposed sewer line is located outside the limits of disturbance, along the south entrance of Winslow Street.
8. Provide a construction entrance, as necessary, to prevent sediment from entering the street.



C-3 : 30" DIAM.  $Q_{10} = 14.4 \text{ CFS}$

Curves may not be extrapolated.

Figure 8.06b Design of outlet protection from a round pipe flowing full, maximum tailwater condition ( $T_w \geq 0.5$  diameter).



**RICHARDSON SMITH GARDNER & ASSOCIATES, INC.**

Engineering and Geological Services

May 14, 2009

Ms. Evangelyn Lowery-Jacobs  
*Assistant Regional Engineer*  
**Division of Land Resources**  
Land Quality Section  
225 Green Street, Suite 714  
Fayetteville, North Carolina 28301-5043

Re: **Response to Comments**  
**Erosion and Sedimentation Control/Stormwater Plan**  
**Fayetteville Transfer Station**  
**Fayetteville, North Carolina**

Dear Ms. Lowery-Jacobs,

On behalf of Waste Industries, Richardson Smith Gardner & Associates, Inc (RSG) is submitting responses to comments regarding the *Erosion and Sedimentation Control/Stormwater Plan* (the E&S plan) for the Fayetteville Transfer Station submitted to the attention of Mr. Steve Cook on April 2, 2009. Subsequent actions and documents related to this plan are listed below, followed by the comments and responses.

On April 3, RSG was contacted by Mr. Lee Cottrell and informed that an additional set of drawings and a revised FRO form were needed. The additional set of drawings was sent by RSG on April 3 and the revised FRO form was faxed from the Waste Industries office in Wilson on April 15, 2009. On April 16, Ms. Diane Adams issued a letter with a checklist of items (**attached**) based on preliminary review. One of the needed items was provided, namely a "Permission to Disturb" letter from the City of Fayetteville, dated May 1, 2009. On May 11, Ms. Evangelyn Lowery-Jacobs sent an email (**attached**) to RSG listing additional information needed (by May 14).

Six of the nine drawings included in the E&S plan (titled *Permit to Construct Drawings*) have been revised in response to comments. A complete set of nine drawings is **attached**. Each comment from April 16 and May 11 is presented below followed by a response.

**April 16 Comment No. 1**

*Please submit a letter of consent from the City of Fayetteville allowing Waste Industries to perform land disturbing activity.*

**Response**

A letter of consent dated May 1, 2009 was sent by Mr. Gerald Dietzen, Solid Waste Director for the City of Fayetteville, to Mr. Steve Cook in your office. A copy of this letter is **attached**.

**April 16 Comment No. 2**

*Please show and label EVERY sediment and erosion control measure on the plan (silt fence, sediment basins, diversion ditches, etc.).*

**Response**

Sheet 4 has been re-titled "Landscape Plan/E&S Control Plan. In addition to including the symbols for erosion and sedimentation (E&S) control features in the legend and showing the symbols on the plan, labels have been added to previously unlabeled features.

**April 16 Comment No. 3**

*The plan shows a wet detention basin. If the sediment and erosion control measure is a sediment basin (which will later be converted to a wet detention basin), then please label the measure on the plan as a sediment basin. Provide dimension of the basin on the plan.*

**Response**

On Sheet 4, the feature is now labeled "Sediment Basin/Wet Detention Basin." The multitude of requirements that apply to this feature have led to a complex geometry that is not adequately described by one or two unspecified dimensions. The geometry of this feature is presented in detail in Appendix A of the E&S plan.

**April 16 Comment No. 4**

*Please provide a copy of the 401/404 permit allowing the disturbance of the wetland areas identified on the plan.*

**Response**

The 401/404 permit has not yet been received but is expected in the near future. A copy of the 401/404 application (excluding the E&S plan and engineering drawings, which are identical to the plan and drawings previously submitted to your office) is **attached**. When the 401/404 permit is received, a copy will be provided.

**May 11 Comment No. 1**

*Inlet protection for the proposed drop inlets on the project site. Provide a plan detail, construction specifications, and maintenance requirements for the method of choice.*

**Response**

On Sheet 9, a detail, specifications, and maintenance requirements for hardware cloth & gravel inlet protection have been added. This measure does not apply to the drop inlets in the pit, which will connect to the city sewer and will be blocked until the new transfer station begins to operate.

**May 11 Comment No. 2**

*Provide a measure, along the gabion retaining wall, to divert flow into the wet detention basin. Provide a plan detail, construction specifications, and maintenance requirements for the method of choice.*

**Response**

The maximum ground surface elevation at the top of the gabion wall has been lowered from elevation 101.0 feet to 100.8 feet. The top of the gabion wall is at elevation 101.0 feet. The elevation difference of 0.2 feet and the slope of the ground (away from the wall) will divert flow into the wet detention basin. In addition, as directed by the Land Quality Section, a silt fence has been added along the top of the gabion retaining wall.

**May 11 Comment No. 3**

*The plan shows an area containing a 6' grassed berm along the western border of the project site. Provide a measure around the base of the slope to prevent sediment from entering the sidewalk area.*

**Response**

On Sheet 4, silt fence has been added along the existing chain link fence and the short segment of proposed chain link fence that borders the 6' grassed berm. This silt fence will be attached directly to the chain link fence and anchored in a toe trench.

**May 11 Comment No. 4**

*All areas disturbed or to be disturbed must be located within the limits of disturbance. The current plan shows the proposed outbound scales, and scale house outside the limits.*

**Response**

On Sheet 3, the "Limit of Disturbance" line has been revised to include the proposed scale house (and already includes the proposed outbound scale). The "Limit of Disturbance/Demolition Area" line on Sheet 2 has not been changed because the existing pavement at the proposed scale house location will not be demolished. A prefabricated building will be anchored to the existing pavement. The proposed scale house has been included in the limit of disturbance only because a trench for buried utilities may be needed.

**May 11 Comment No. 5**

*Include maintenance requirements for the proposed detention basin.*

**Response**

On Sheet 8, maintenance requirements for the proposed sediment basin (prior to and during conversion to permanent wet detention basin) have been added.

**May 11 Comment No. 6**

*Provide the original Financial Responsibility/Ownership form showing Waste Industries, LLC as the financially responsible party for the project.*

**Response**

The original Financial Responsibility/Ownership form dated May 14, 2009 is **attached**.

Ms. Evangelyn Lowery-Jacobs  
May 14, 2009  
Page 4

We appreciate your assistance in this review process.

Sincerely,  
**Richardson Smith Gardner & Associates, Inc.**



Thomas B. Maier, P.E.  
Senior Project Engineer x128  
[tom@rsgengineers.com](mailto:tom@rsgengineers.com)

Attachments (Correspondence: Adams, Lowery-Jacobs, Dietzen; FRO; 401/404 App.; Drawings)

Copies to: Carl Massey, Waste Industries  
John Larch, City of Fayetteville



REC'D APR 20 2009

North Carolina Department of Environment and Natural Resources  
Division of Land Resources

James D. Simons, PG, PE  
Director and State Geologist

Land Quality Section

Beverly Eaves Perdue, Governor  
Dee Freeman, Secretary

April 16, 2009

**LETTER OF RECEIPT OF EROSION CONTROL PLAN**

D. Stephen Grissom, CFO  
Waste Industries, LLC  
3301 Benson Drive  
Suite 601  
Raleigh, NC 27609

RE: **Project Name:** City of Fayetteville Transfer Station  
**Project ID:** Cumbe-2009-101  
**County:** Cumberland Fayetteville Winslow Street  
**River Basin:** Cape Fear **Stream Classification:** Other  
**Submitted By:** Richardson Smith Gardner & Associates, Inc.  
**Date Plan Received by LQS:** 4/15/2009  
**Date Fee Received by LQS:** 4/15/2009  
**Plan Type:** New

Dear D. Stephen Grissom, CFO:

This office has received a soil erosion and sediment control plan for the project listed above which was submitted as required by the North Carolina Sedimentation Pollution Control Act (G.S. 113A-57 (4)).

The Act requires that all persons disturbing an area of one or more acres of land must obtain approval of a soil erosion control plan prior to the commencement of the land-disturbing activity (G.S. 113A-54(d) (4)). The Act further states that this plan must be filed a minimum of 30 days prior to the activity and the approving authority must approve or disapprove the submitted plan within 30 days of receipt. The 30-day time frame begins with the latter of the Plan Received Date or the Fee Received Date. Failure of the approving authority to approve or disapprove the submitted plan within the 30-day period will be deemed approval of the plan.

Commencement or continuation of a land-disturbing activity under the jurisdiction of this Act prior to the approval of an erosion and sediment control plan is a violation of the Act.

Letter of Receipt  
Waste Industries, LLC  
April 16, 2009  
Page 2 of 2

We have performed a preliminary review of your submitted plan and have determined that additional information will be necessary before a final review can be completed. Enclosed is a checklist of items that must be submitted before we can complete the review process. Failure to provide the additional information may result in disapproval of your plan.

The approval of an erosion and sediment control plan is conditioned on the applicant's compliance with Federal and State water quality laws, regulations and rules.

If you have questions, please do not hesitate to contact this office. Your cooperation in this matter is appreciated and we look forward to working with you on this project.

Sincerely,



Diane Adams  
Land Quality Section

cc: **Richardson Smith Gardner & Associates, Inc.**  
Land Quality Section-Regional Office File

**NORTH CAROLINA DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES  
LAND QUALITY SECTION**

**EROSION and SEDIMENTATION CONTROL PLAN PRELIMINARY REVIEW CHECKLIST**

**PROJECT NAME:** City of Fayetteville Transfer Station    **DATE:** April 16, 2009

**PROJECT NO.:** Cumbe-2009-101

**COUNTY:** Cumberland

To expedite the approval process, a cursory review of your submitted Erosion and Sediment Control Plan application has been made and has shown the need for additional information as specified below. **To meet our review schedule, any additional information should be received by this office no later than May 1, 2008. Failure to meet this schedule may result in disapproval of your plan.**

The following items shall be incorporated with respect to specific site conditions, in an erosion & sediment control plan:

**LOCATION INFORMATION**

- Project location (roads, streets, landmarks)
- North arrow and scale

**GENERAL SITE FEATURES (Plan elements)**

- Legend: North arrow, scale, etc.
- Property lines
- Existing contours (topographic lines)
- Proposed contours
- Limits of disturbed area (provide acreage total, delineate limits, and label)
- Planned and existing building locations and elevations
- Planned & existing road locations & elevations
- Lot and/or building numbers
- Geologic features: rock outcrops, seeps, springs, wetland and their limits, streams, lakes, ponds, dams, etc.
- Easements and drainage ways
- Profiles of streets, utilities, ditch lines, etc.
- Stockpiled topsoil or subsoil locations
- If the same person conducts the land-disturbing activity & any related borrow or waste activity, the related borrow or waste activity shall constitute part of the land-disturbing activity unless the borrow or waste activity is regulated under the Mining Act of 1971, or is a landfill regulated by the Division of Waste Management. If the land-disturbing activity and any related borrow or waste activity are not conducted by the same person, they shall be considered separate land-disturbing activities and must be permitted either thru the Sedimentation Pollution Control Act as a one-use borrow site or through the Mining Act.
- Required Army Corps 404 permit and Water Quality 401 certification (e.g. stream disturbances over 150 linear feet)

**EROSION CONTROL MEASURES (on plan)**

- Legend
- Location of temporary measures
- Location of permanent measures
- Construction drawings and details for temporary and permanent measures
- Maintenance requirements of measures

- Contact person responsible for maintenance

**SITE DRAINAGE FEATURES**

- Existing and planned drainage patterns (include off-site areas that drain through project)
- Method of determination of and calculations for Acreage of land being disturbed
- Size and location of culverts and sewers
- Soil information: type, special characteristics
- Soil information below culvert storm outlets
- Name and classification of receiving water course or name of municipal operator (only where stormwater discharges are to occur)

**STORMWATER CALCULATIONS**

- Pre-construction runoff calculations for each outlet from the site (at peak discharge points)
- Design calculations for peak discharges of runoff (including the construction phase & the final runoff coefficients of the site)
- Design calcs of culverts and storm sewers
- Discharge and velocity calculations for open channel and ditch flows (easement & right-of-ways)
- Design calcs of cross sections and method of stabilization of existing and planned channels (include temporary linings)
- Design calcs and construction details of energy dissipators below culvert and storm sewer outlets (diameters & apron dimensions)
- Design calcs and dimension of sediment basins
- Surface area and settling efficiency information for proposed sediment traps and/or basins

**VEGETATIVE STABILIZATION**

- Area & acreage to be vegetatively stabilized
- Method of soil preparation
- Seed type & rates (temporary & permanent)
- Fertilizer type and rates
- Mulch type and rates

**FINANCIAL RESPONSIBILITY/OWNERSHIP FORM**

- Completed, signed & notarized FR/O Form
- Accurate application fee (\$50.00 per acre rounded up the next acre with no ceiling amount)
- Certificate of assumed name, if the owner is a partnership
- Name of Registered Agent (if applicable)
- Copy of the most current Deed for the site

NOTE: For the Express Permitting Option, inquire at the local Regional Office for availability.

**NARRATIVE AND CONSTRUCTION SEQUENCE**

- Narrative describing the nature & purpose of the construction activity
- Construction sequence related to erosion and sediment control (including installation of critical measures prior to the initiation of the land-disturbing activity & removal of measures after areas they serve are permanently stabilized)
- letter of consent
- Bid specifications related only to erosion control

NOTE: Pursuant to G.S. 113A-57(2), the angle for graded slopes and fills shall be no greater than the angle that can be retained by vegetative cover or other adequate erosion-control devices or structures. In any event, slopes left exposed will, within 21 calendar days of completion of any phase of grading, be planted or otherwise provided with temporary or permanent ground cover, devices, or structures sufficient to restrain erosion. Pursuant to G.S. 113A-57(3), provisions for permanent groundcover sufficient to restrain erosion must be accomplished for all disturbed areas within 15 working days or 90 calendar days (whichever is shorter) following completion of construction or development.

Comments:

1. Please submit a letter of consent from the City of Fayetteville allowing Waste Industries to perform land disturbing activity.
2. Please show and label EVERY sediment and erosion control measure on the plan (silt fence, sediment basins, diversion ditches, etc.).
3. The plan shows a wet detention basin. If the sediment and erosion control measure is a sediment basin (which will later be converted to a wet detention basin), then please label the measure on the plan as a sediment basin. Provide dimension of the basin on the plan.
4. Please provide a copy of the 401/404 permit allowing the disturbance of the wetland areas identified on the plan.

Reviewed by Diane Adams

Updated 01/06

**Tom Maier**

**From:** Lowery-jacobs, Evangelyn [evangelyn.lowery-jacobs@ncdenr.gov]  
**Sent:** Monday, May 11, 2009 3:44 PM  
**To:** tom@rsgengineers.com  
**Cc:** Lowery-jacobs, Evangelyn  
**Subject:** City of Fayetteville Transfer Station

Mr. Maier,

I am currently reviewing the recent submittal for the City of Fayetteville Transfer Station , and need additional information. To meet our review schedule, any information should be received by this office no later than May 14, 2009.

1. Inlet protection for the proposed drop inlets on the project site. Provide a plan detail, construction specifications, and maintenance requirements for the method of choice.
2. Provide a measure, along the gabion retaining wall, to divert flow into the wet detention basin. Provide a plan detail, construction specifications, and maintenance requirements for the method of choice.
3. The plan shows an area containing a 6' grassed berm along the western border of the project site. Provide a measure around the base of the slope to prevent sediment from entering the sidewalk area.
4. All areas disturbed or to be disturbed must be located within the limits of disturbance. The current plan shows the proposed outbound scales, and scale house outside the limits.
5. Include maintenance requirements for the proposed detention basin.
6. Provide the original Financial Responsibility/Ownership form showing Waste Industries, LLC as the financially responsible party for the project.

Thank you.  
Evangelyn

**Evangelyn Lowery-Jacobs**  
**Assistant Regional Engineer**  
**NC Dept of Environment and Natural Resources**  
**Land Quality Section**  
**225 Green Street, Suite 714**  
**Fayetteville, NC 28301-5043**  
**910-433-3300 phone**  
**910-486-0707 fax**

\*\*\*\*\*  
**E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.**  
\*\*\*\*\*



May 1, 2009

Mr. Steve Cook  
Regional Engineer  
NCDENR Division of Land Resources  
Land Quality Section  
225 Green Street, Suite 714  
Fayetteville, NC 28301-5094

RE: Permission to Disturb  
Fayetteville Transfer Station

Dear Mr. Cook,

The City of Fayetteville hereby gives permission for Waste Industries to disturb the Fayetteville Transfer Station site for the development depicted in the *Erosion and Sedimentation Control/Stormwater Plan, Fayetteville Transfer Station* prepared by Richardson Smith Gardner & Associates, dated March 2009 and previously submitted to your attention on or about April 1, 2009.

Sincerely,

City of Fayetteville

A handwritten signature in black ink, appearing to read "Gerald Dietzen", is written over a faint, larger version of the same signature.

Gerald Dietzen  
Solid Waste Director

Copy to: Carl Massey, Waste Industries  
Thomas Maier, Richardson Smith Gardner & Associates

**FINANCIAL RESPONSIBILITY/OWNERSHIP FORM  
SEDIMENTATION POLLUTION CONTROL ACT**

No person may initiate any land-disturbing activity on one or more acres as covered by the Act before this form and an acceptable erosion and sedimentation control plan have been completed and approved by the Land Quality Section, N.C. Department of Environment and Natural Resources. (Please type or print and, if the question is not applicable or the e-mail and/or fax information unavailable, place N/A in the blank.)

**Part A.**

1. Project Name City of Fayetteville Transfer Station
2. Location of land-disturbing activity: County Cumberland City or Township Fayetteville  
Highway/Street 583 Winslow Street Latitude 35deg02'45"N Longitude 78deg53'23"W
3. Approximate date land-disturbing activity will commence: July 1, 2009
4. Purpose of development (residential, commercial, industrial, institutional, etc.): Commercial
5. Total acreage disturbed or uncovered (including off-site borrow and waste areas): 4.7 acres
6. Amount of fee enclosed: \$ 325. The application fee of \$65.00 per acre (rounded up to the next acre) is assessed without a ceiling amount (Example: a 9-acre application fee is \$585).
7. Has an erosion and sediment control plan been filed? Yes \_\_\_\_\_ No \_\_\_\_\_ Enclosed X
8. Person to contact should erosion and sediment control issues arise during land-disturbing activity:  
Name Carl Massey E-mail Address carl.massey@wasteindustries.com  
Telephone 910-423-4122 x32428 Cell # 910-237-8543 Fax # 910-423-4125
9. Landowner(s) of Record (attach accompanied page to list additional owners):  

<u>City of Fayetteville</u>	<u>910-433-1984</u>	<u>910-433-1516</u>
Name	Telephone	Fax Number
<u>433 Hay Street</u>	<u>same</u>	
Current Mailing Address	Current Street Address	
<u>Fayetteville, NC 28301-5537</u>	<u>same</u>	
City State Zip	City State Zip	
10. Deed Book No. see attached Page No. \_\_\_\_\_ Provide a copy of the most current deed.

**Part B.**

1. Person(s) or firm(s) who are financially responsible for the land-disturbing activity (Provide a comprehensive list of all responsible parties on an attached sheet):  

<u>Waste Industries, LLC</u>	<u>steve.grissom@wasteindustries.com</u>
Name	E-mail Address
<u>3301 Benson Dr., Suite 601</u>	<u>same</u>
Current Mailing Address	Current Street Address
<u>Raleigh, NC 27609</u>	
City State Zip	City State Zip
Telephone <u>919-325-3000</u>	Fax Number <u>919-325-4040</u>

2. (a) If the Financially Responsible Party is not a resident of North Carolina, give name and street address of the designated North Carolina Agent:

Name _____			E-mail Address _____		
Current Mailing Address _____			Current Street Address _____		
City _____	State _____	Zip _____	City _____	State _____	Zip _____
Telephone _____			Fax Number _____		

- (b) If the Financially Responsible Party is a Partnership or other person engaging in business under an assumed name, **attach a copy of the Certificate of Assumed Name**. If the Financially Responsible Party is a Corporation, give name and street address of the Registered Agent:

Name of Registered Agent _____			E-mail Address _____		
Current Mailing Address _____			Current Street Address _____		
City _____	State _____	Zip _____	City _____	State _____	Zip _____
Telephone _____			Fax Number _____		

The above information is true and correct to the best of my knowledge and belief and was provided by me under oath (This form must be signed by the Financially Responsible Person if an individual or his attorney-in-fact, or if not an individual, by an officer, director, partner, or registered agent with the authority to execute instruments for the Financially Responsible Person). I agree to provide corrected information should there be any change in the information provided herein.

<u>D. Stephen Grissom</u> Type or print name	<u>Chief Financial Officer</u> Title or Authority
<u><i>D. Stephen Grissom</i></u> Signature	<u>5.14.09</u> Date

I, Cynthia D. Spencer, a Notary Public of the County of Wake  
State of North Carolina, hereby certify that D. Stephen Grissom appeared  
personally before me this day and being duly sworn acknowledged that the above form was  
executed by him.

Witness my hand and notarial seal, this 14<sup>th</sup> day of May, 2009

Cynthia D. Spencer / Cynthia D. Spencer  
Notary

My commission expires 4-16-11

Seal

**Note for Attachment H:**  
**The voluminous Erosion & Sedimentation Control/Stormwater Plan**  
**is provided electronically on the enclosed CD.**

**ATTACHMENT I**  
**FINANCIAL ASSURANCE CALCULATIONS**

**Financial Assurance  
Fayetteville Transfer Station  
Engineer's Remedial Cost Estimate**

Item No.	Item Description	Unit	Quantity	Unit Price	Contractor Total Price	Comments
	Facility Area (Horizontal Plan) ----->	AC	9			
	Active Area (Horizontal Plan) ----->	AC	4			
<b>1.0</b>	<b>Pre-Remedial Response</b>			<b>Subtotal</b>	<b>\$2,000.00</b>	
1.1	Coordination, Contracts, and Management	AC	4	\$500.00	\$2,000.00	
<b>2.0</b>	<b>Remedial Response Activities</b>			<b>Subtotal</b>	<b>\$135,850.00</b>	Ref. 1
2.1	Surveys and Layout	AC	4	\$250.00	\$1,000.00	RSG Estimate
2.2	Mobilization, Demobilization, and Project Closeout	AC	4	\$500.00	\$2,000.00	RSG Estimate
2.3	Wash Down & Cleanup of the Transfer Station	DY	2	\$1,500.00	\$3,000.00	Assume single work crew per day.
2.4	Fencing (existing)	LS	0	\$5,000.00	\$0.00	Assume close transfer station and lock gates.
2.5	Excess Waste Disposal (MSW)	TN	2,500	\$40.75	\$101,875.00	Five (5) days of waste as specified by NCDENR at the Sampson County Landfill fee.
2.6	Excess Waste Hauling (MSW)	TN	2,500	\$9.19	\$22,975.00	Five (5) days of waste as specified by NCDENR to the Sampson County Landfill.
2.7	Leachate Disposal	GAL	0	\$0.10	\$0.00	Existing Sewer Connection
2.8	Erosion & Sediment Control (grading, silt fence, maintenance, etc.)	AC	4	\$500.00	\$2,000.00	RSG Estimate
2.9	Revegetation	AC	2	\$1,500.00	\$3,000.00	RSG Estimate
<b>3.0</b>	<b>Quality Assurance, Certification, &amp; Deed Notation</b>			<b>Subtotal</b>	<b>\$3,000.00</b>	
3.1	Engineering and Reporting	LS	1	\$2,500.00	\$2,500.00	RSG Estimate
3.2	Surveying and Deed Notation	LS	1	\$500.00	\$500.00	RSG Estimate
	<b>Remedial Response Estimate -----&gt;</b>				<b>\$140,850</b>	
	<b>10% Contingency -----&gt;</b>				<b>\$14,085</b>	
	<b>Total Estimate -----&gt;</b>				<b>\$154,935 (2009\$) (See Note 1)</b>	

Notes:

- All costs are presented in current dollars and should be increased at an inflation rate of 1.5% if additional review is not performed annually.
- This ESTIMATE has been prepared for financial assurance purposes only and shall not be considered a replacement for an actual bid from a licensed contractor and is considered acceptable within +/- 10% of the Total Estimate value.

References:

- Fayetteville Transfer Station Application for Permit to Construct by Richardson Smith Gardner & Associates, Inc dated May 2009.

**ATTACHMENT J**  
**TRAFFIC COMPLIANCE**



TRAFFIC SERVICES DIVISION 339 ALEXANDER STREET

April 20, 2009

REC'D APR 21 2009

Thomas B. Maier, PE  
Richardson Smith Gardner & Associates  
14 N. Boylan Ave.  
Raleigh, NC 27603

SUBJECT: Driveway Permit for the Transfer Station

Dear Mr. Maier,

This is in regards to your driveway permit request for access onto Winslow Street. The City of Fayetteville has approved the requested driveway permit without the need for a Traffic Impact Analysis.

If I may be of further assistance, please call (910) 433-1153.

Sincerely,

  
R. W. Thompson  
City Traffic Engineer

cc: Bobby Teague  
Jerry Dietzen

339 ALEXANDER STREET  
FAYETTEVILLE, NC 28301-5797  
(910) 433-1660/1661  
FAX (910) 433-1647  
An Equal Opportunity Employer  
[www.cityoffayetteville.org](http://www.cityoffayetteville.org)

**ATTACHMENT K**  
**ENGINEERING DRAWINGS**

PRELIMINARY  
NOT FOR CONSTRUCTION

Waste Industries  
Fayetteville Proposal

Fayetteville, North Carolina

Release Information

Release Date:	01.08.2009	
Issued:	Issue For Permit	
Revisions:		
Mark	Date	Description

AEI Project No.: 8056

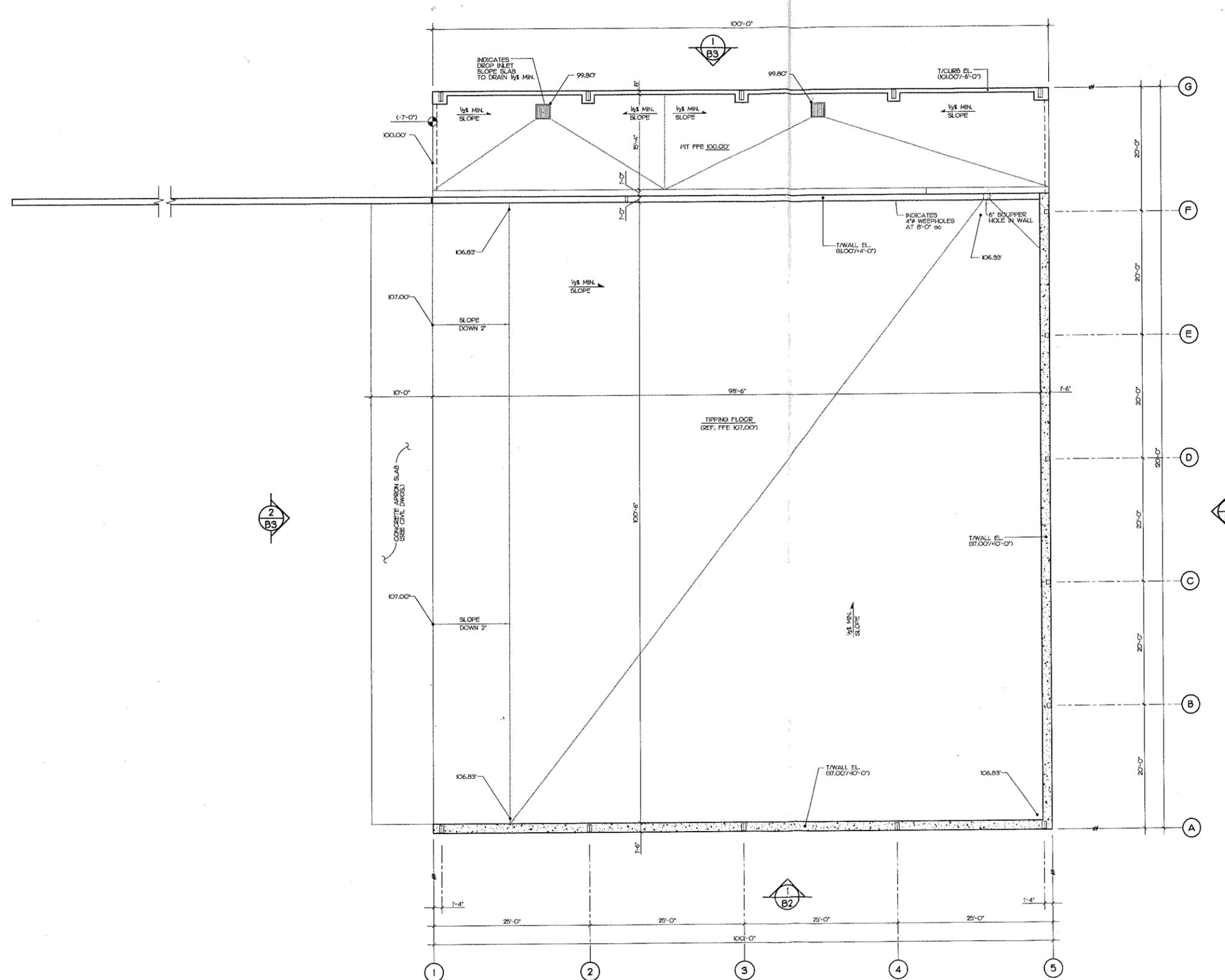
ALL IDEAS, DESIGNS, DRAWINGS, AND SPECIFICATIONS SHOWN THEREON ARE THE PROPERTY OF ARP ENGINEERING, INC. ALL RIGHTS RESERVED INCLUDING RIGHTS OF REPRODUCTION. THIS DRAWING MUST NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF ARP ENGINEERING, INC.  
COPYRIGHT © 2008, ARP ENGINEERING, INC.

Sheet Title:

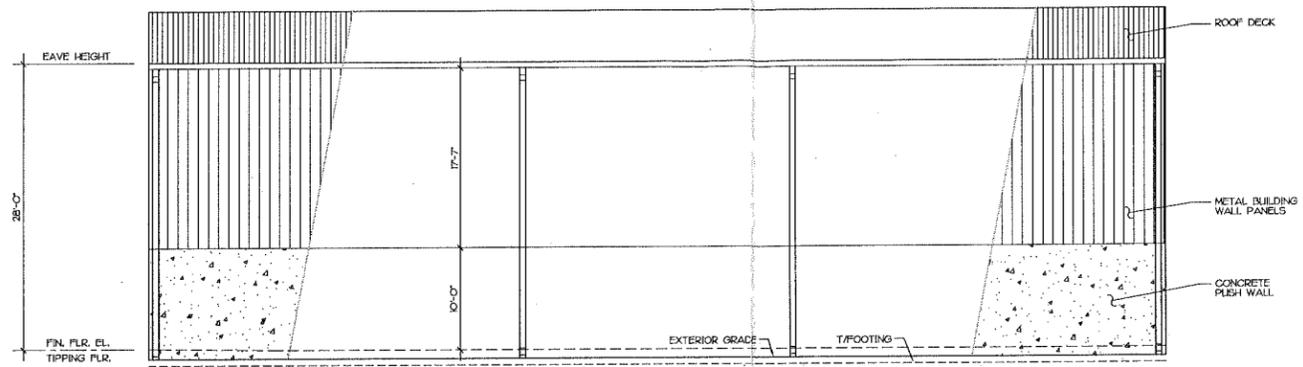
FLOOR PLAN

STRUCTURAL

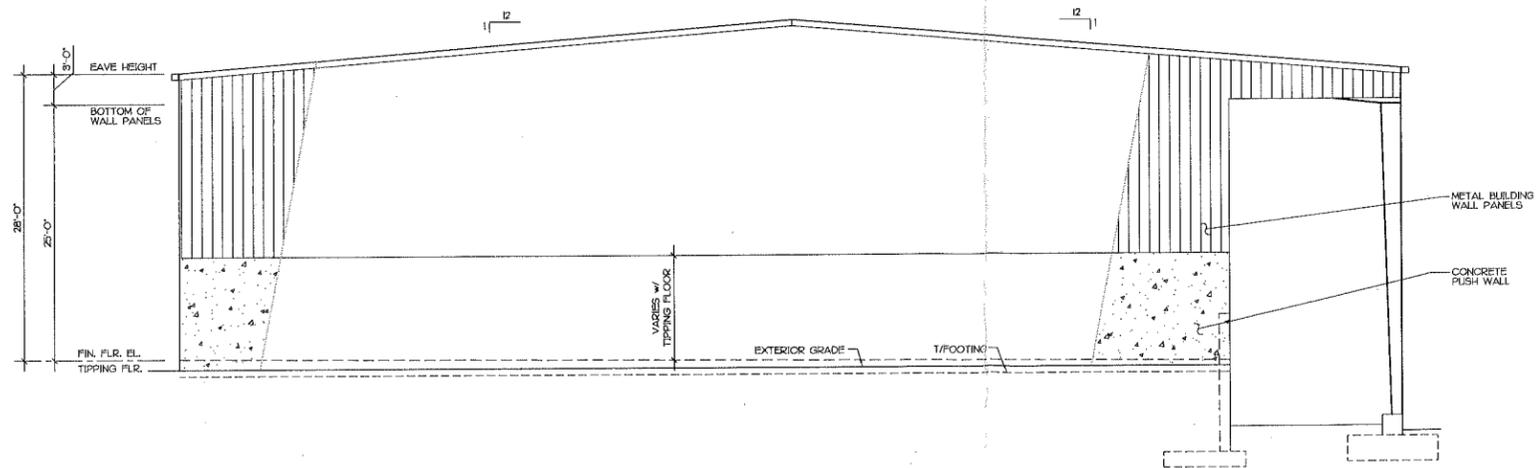
BI



1 FLOOR PLAN  
BI 1/8" = 1'-0" TRANSFER STATION



1 SOUTH ELEVATION  
B2 1/8" = 1'-0" TRANSFER STATION



2 EAST ELEVATION  
B2 1/8" = 1'-0" TRANSFER STATION

ARP ENGINEERING  
CONSULTING ENGINEERS

PO BOX 587 · MONROE · NC 28111  
(704) 225-0079

PRELIMINARY  
NOT FOR CONSTRUCTION

Waste Industries  
Fayetteville Proposal

Fayetteville, North Carolina

Release Information		
Release Date:	01.08.2009	
Issued:	Issue For Permit	
Revisions:	Mark	Date Description

AEI Project No.: 8055

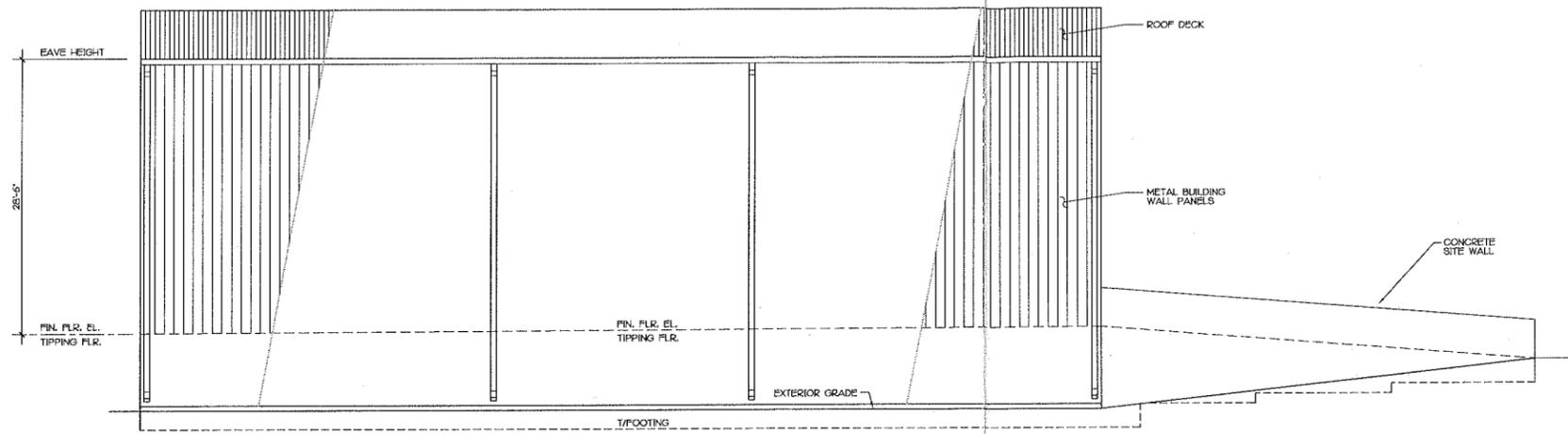
ALL IDEAS, DESIGNS, DRAWINGS, AND SPECIFICATIONS SHOWN THEREON ARE THE PROPERTY OF ARP ENGINEERING INC. ALL RIGHTS RESERVED INCLUDING RIGHTS OF REPRODUCTION. THIS DRAWING MUST NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF ARP ENGINEERING INC.  
COPYRIGHT © 2009, ARP ENGINEERING INC.

Sheet Title

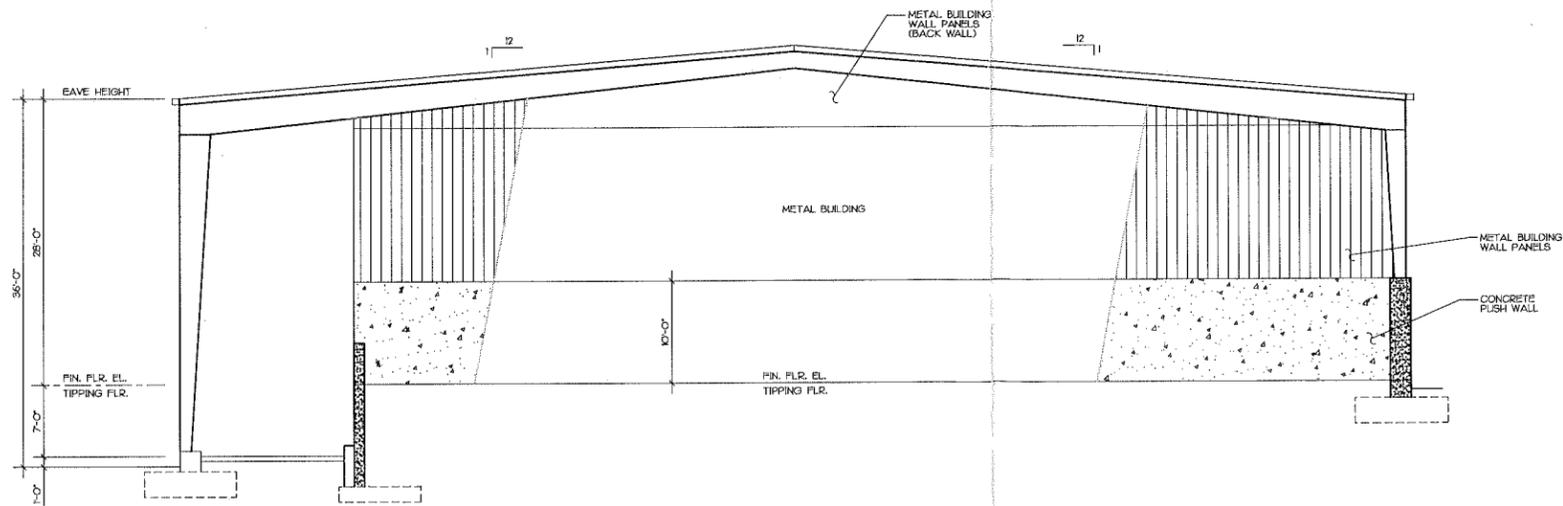
BUILDING ELEVATIONS

STRUCTURAL

B2



1 NORTH ELEVATION  
B3 1/8" = 1'-0" TRANSFER STATION



2 WEST ELEVATION  
B3 1/8" = 1'-0" TRANSFER STATION

ARP ENGINEERING  
CONSULTING ENGINEERS

PO BOX 587 · MONROE · NC 28111  
(704) 225-0079

PRELIMINARY  
NOT FOR CONSTRUCTION

Waste Industries  
Fayetteville Proposal

Fayetteville, North Carolina

Release Information		
Release Date:	01.08.2009	
Issued:	Issue For Permit	
Revisions:	Mark	Date Description

AEI Project No.: 8056

ALL IDEAS, DESIGNS, DRAWINGS, AND SPECIFICATIONS SHOWN  
HEREIN ARE THE PROPERTY OF ARP ENGINEERING INC. ALL  
RIGHTS RESERVED INCLUDING RIGHTS OF REPRODUCTION.  
THIS DRAWING MUST NOT BE REPRODUCED OR COPIED IN  
WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN  
PERMISSION OF ARP ENGINEERING INC.  
COPYRIGHT © 2009, ARP ENGINEERING INC.

Sheet Title

BUILDING ELEVATIONS

STRUCTURAL

B3